RECR – 27

Roland Jackson Well

CORRESPONDENCE



April 2, 2012

#5121620

Mr. Jim Griswold Senior Hydrologist EMNRD/Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505 (505) 476-3465 *jim.griswold@state.nm.us*

RE: WORKPLAN FOR SITE INVESTIGATION, MAVERIK REFINERY/ROLAND JACKSON WATER WELL ISSUE, NEAR KIRTLAND, NEW MEXICO

Dear Mr. Griswold:

Enclosed please find the workplan for initial investigation of the Maverik Refinery/Roland Jackson Water Well Issue. The site is located approximately 1.5 miles east of the Kirtland, NM Post Office in Section 17, Township 29 North, Range 14 West, San Juan County, New Mexico. The physical address is #20 CR 6271, Kirtland, NM. This workplan is submitted at the request of the New Mexico Oil Conservation Division (NMOCD) and is in accordance with the State of New Mexico General Services Department Purchasing Division Price agreement #: 10-805-00-07208. The intent of this workplan is to perform an investigation as to the extent and potential source of petroleum contamination impacting groundwater at the Jackson property. Souder, Miller & Associates (SMA) appreciates this opportunity to provide environmental consulting services.

Acceptance

Please indicate your acceptance of this workplan by endorsing a copy of this letter and returning it to us. You may retain the original for your records. This workplan may be withdrawn, at the option of SMA, if it has not been accepted within 30 days of its date of issue. If you have any questions or comments concerning this workplan, please feel free to call me at (505) 325-7535 or contact me via e-mail.

Sincerely,

MILLER ENGINEERS, INC. D/B/A SOUDER, MILLER & ASSOCIATES

ACCEPTED:

Cindy Gray, CHMM, Senior Scientist

Ву:_____

Title:

Date:

Douglas M. Mize, P.E., Vice President

WORKPLAN & BUDGET INITIAL SITE INVESTIGATION

New Mexico Oil Conservation Division Maverik Refinery/Roland Jackson Water Well Issue Kirtland, New Mexico

April 2, 2012

INTRODUCTION

This workplan and budget have been prepared by Souder, Miller & Associates (SMA) pursuant to the request from the New Mexico Oil Conservation Division (NMOCD) and is in accordance with the State of New Mexico General Services Department Purchasing Division Price Agreement #10-805-00-07208. The proposed scope of work shall include an initial investigation with up to seven borings and installation of up to five monitoring wells on and adjacent to the Roland and Angie Jackson Property. The monitoring wells will be sited as a means of determining the extent and possible origin of non-aqueous petroleum liquids (*NAPL*) found in the Roland Jackson well at #20 CR 6271, San Juan County, New Mexico. The Jackson Property site is in the SW/4, SE/4 Section 17, Township 29 North, Range 14 West.

To date, no independent investigation of the Jackson Property site has been conducted. However, historical evidence at the site indicates that potential impact from the Maverik/Caribou Refinery plume may persist. This evidence includes laboratory results of sampling of the Jackson irrigation water supply well in 2005 and the presence of NAPL in the well visually confirmed by NMOCD personnel on February 2, 2012.

Estimated costs for an initial investigation to evaluate and potentially identify the source of the hydrocarbon plume impacting the Jackson property are included in the table below, developed on a time and materials basis per the State of New Mexico General Services Department Purchasing Division Price Agreement #10-805-00-07208. All invoices issued for work performed on a time and material basis will include an itemized breakdown of charges per the approved fee schedule. Cynthia Gray, C.H.M.M., Senior Scientist for SMA, and Denny Foust, Senior Geologist for SMA, will exercise direct supervisory control over the completion of this project. Meetings will be held with NMOCD to further discuss the scope of work, as necessary.



Items	Task Description	Number of Units	Subtotal	Total	
Task 1a	Sk 1aDrilling: seven 20 ft borings =140 total feet; includes five completed as monitoring wells - EnviroDrill, Inc.1\$15,030.00				
			NMGRT 7.125%	\$1,070.89	
			Total	\$16,100.89	
Task 1b	Investigation and Sampling Oversight: review existing documents, workplan prep, HASP prep, property access, notifications, drilling oversight, sampling, survey, laboratory analytical costs	1	\$20,379.80	\$20,379.80	
	•		NMGRT 7.125%	\$1,452.06	
			Total	\$21,831.86	
Task 2	Evaluation, report, and recommendations	1	\$6,084.00	\$6,084.00	
	·		NMGRT 7.125%	\$433.49	
			Total	\$6,517.49	
Task 3	Bond Acquisition, Bond Premium on estimated total of \$40,000	1	\$2,152.00	\$2,152.00	
			NMGRT 7.125%	\$153.33	
			Total	\$2,305.33	
			Grand Total	\$46,755.56	

* Includes all anticipated drilling costs as described below. However, drilling costs will be billed on an actual time and materials basis

TASK 1A – 1B: SOIL BORING AND MONITORING WELL DRILLING AND DRILLING OVERSIGHT

In order to assess the hydrocarbon plume impacting the Roland Jackson irrigation water supply well, SMA initially recommends installation of seven (7) soil borings with up to five (5) of the borings completed as monitoring wells. SMA will oversee all drilling activities and will perform field screening and collection of groundwater samples for laboratory analysis. Currently, SMA is anticipating four (4) days of drilling oversight and field sampling activities. SMA will confer with NMOCD for authorization prior to implementation of any additional days of drilling oversight, if needed.

Access Permission, UTILITY CLEARANCE, WORK NOTIFICATION, HEALTH & SAFETY: In preparation for drilling and field sampling, written access permission to the various drilling sites will be obtained from the surface owners. Utility clearances from New Mexico One-Call and courtesy notification of the Aztec office of the State Engineer (NMOSE) will be made prior to the start of drilling activities. SMA will notify NMOCD a minimum of 96 hours before commencing field activities. A site specific health and safety plan (HASP) will be developed in accordance with OSHA regulations and the SMA Corporate Health & Safety Program. All site personnel will be briefed on the HASP prior to initiating drilling activities.

EXISTING IRRIGATION WELL SAMPLING: Two irrigation water supply wells are present on the Roland Jackson property. Written permission will be obtained from the landowner to



access the two irrigation supply wells to sample the groundwater. The samples will be analyzed for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) by EPA Method 8015 and for total lead by EPA Method 6010. Should significant total lead be detected, SMA will contact NMOCD to consider additional analysis to speciate organic lead. Access permission will also be sought for sampling of any additional wells available on the property or adjacent properties. Should additional wells be available for sampling, SMA will secure NMOCD approval prior to incurring costs of sampling and laboratory analysis.

DRILLING CONTRACTOR AND METHOD: EnviroDrill has been selected as the drilling contractor based on their experience completing monitoring wells in river cobbles along the Animas and San Juan Rivers. The unconsolidated riverine deposits will require air hammer rotary drilling for borings and monitoring wells.

SOIL BORING AND MONITORING WELL LOCATIONS AND DEPTH: Proposed locations of soil borings and monitoring wells are based on historical data from the refinery investigation, knowledge of the local hydrogeology, and constraints on drilling rig access. The exact depth and location of each soil boring may differ based on field screening results and conditions encountered in the field. The groundwater flow direction and gradient is anticipated to be to the south-southwest with slightly varying direction by season. Figure 1 illustrates the proposed locations of soil borings and monitoring wells. Monitoring wells will be sited relative to the existing irrigation well with one approximately 150-200 feet directly south, a second north, and two wells west of the impacted well. An additional, fifth well may be installed to the northeast. Regardless of the exact depths and locations of the soil borings, no additional work beyond that described herein will be performed without consent of NMOCD.

Based on previous water levels recorded for the Roland Jackson Irrigation Water supply well, groundwater is expected to be encountered from 7 to 8 feet below ground surface (bgs). It is anticipated that the seven soil borings will be advanced to a total depth of approximately 20 feet bgs. As noted, five of the borings will be completed as monitoring wells and two borings sampled and properly plugged.

Soil SAMPLING AND FIELD ANALYSIS PROCEDURES: All borings will be continuously sampled as is possible given soil conditions. Soil will be described at 5 foot vertical intervals or at major lithologic changes. Samples will be collected from each soil boring for lithologic description (ASTM D 2488-93, *Standard Practice for Description and Identification of Soils*), split, and placed in separate containers for field headspace screening and for potential laboratory analysis. Laboratory samples will be collected in clean, laboratory supplied soil jars with Teflon septa that allow for storage on ice or rapid transfer of soils to containers for field preservation or headspace analysis. Samples for laboratory analysis will be labeled with date and time, sealed with chain of custody evidence tape, and placed on ice for shipment to Hall Environmental Analysis Laboratory. Field headspace will be measured with a calibrated photoionization detector (PID).

SMA will collect one soil sample for laboratory analysis from each soil boring. The



sample will be collected either from the vadose zone at the depth where field results and/or field observations indicate the highest levels of contamination, or from immediately above the water table. SMA anticipates a total of 7 soil samples.

SOIL ANALYTICAL METHODS: Soil samples will be analyzed for TPH GRO by EPA Method 8015 and organic lead by EPA Method 6010. Should significant total lead be detected, SMA will contact NMOCD to consider additional analysis to speciate organic lead.

DRILL CUTTINGS DISPOSAL: Any drill cuttings generated during soil boring advancement will be collected and properly disposed of at a permitted site. As the contaminant in question may be refined petroleum product, disposal at a New Mexico Environment Department permitted site may be required. For disposal characterization, one composite sample of drill cuttings in included in the budget for analysis for TPH GRO by EPA Method 8015 and for total lead by EPA Method 6010.

SOIL BORING ABANDONMENT: At the conclusion of the investigation, all soil borings not completed as monitoring wells will be properly plugged with a bentonite/cement slurry in accordance with New Mexico Office of State Engineer requirements.

MONITORING WELL COMPLETION AND DEVELOPMENT PROCEDURES: Up to five monitoring wells will be completed at the site. The wells will be constructed of two inch PVC with fifteen (15) feet of 0.010-inch slot size screen placed across the water table (approximately 12 feet below and 3 feet above, as conditions permit) and an end cap at the bottom. Silica sand (10-20 grade) will be placed from total depth to two feet above the top of the well screen, followed by a one-foot fine-grained silica sand filter pack seal. A two-foot bentonite pellet seal will be placed and hydrated above the filter pack. The annular space above the bentonite will be sealed with bentonite/cement grout. A locking steel surface casing/stand pipe will be installed over the inner PVC casing. The inner PVC casing will be capped with expanding well plugs.

SMA anticipates that ground water will be encountered at a depth of approximately 7 to 8 feet bgs and that monitoring wells will be completed to approximately 18 feet. The planned 15 foot screen length will allow for monitoring of water quality across the full potential vertical extent of soil contamination, and allow for a potentially substantial seasonal rise or fall in the water table.

Wells will be developed by bailing a minimum of three volumes then allowed to stabilize for seven days prior to sampling.

MONITORING WELL SAMPLING PROCEDURES: The five new monitoring wells will be gauged for depth to fluids water and non-aqueous phase liquid (NAPL) prior to purging. If no NAPL exists, site wells will be purged of at least three full well bore volumes until pH, temperature and specific conductivity reach equilibrium and turbidity has been reduced. Water samples will be collected using a new disposable bailer for each well.

GROUNDWATER SAMPLING AND PRESERVATION PROCEDURES: SMA will collect groundwater samples for analysis from the least contaminated well to the most contaminated well,



and not from wells with NAPL. Glassware will be laboratory provided 40 ml VOA/VOC vials preserved with hydrochloric acid. All groundwater sample containers will be labeled with the date and time, sealed with evidence (custody) tape, and stored on ice for shipment to the qualified laboratory using chainof-custody procedures.

GROUNDWATER MONITORING: SMA will collect groundwater samples from the five new monitoring wells. The depth to liquids will be measured prior to purging and the thickness of any NAPL layer will be documented. If free product is encountered, the NMOCD Aztec District office and Santa Fe Environmental Bureau will be immediately notified to allow a NMOCD personnel to witness sampling. Wells will be purged of a minimum of three well bore volumes with dedicated, single use bailers. Should a well purge dry, the well will be considered adequately purged and sampled upon groundwater recovery.

Samples will be collected in order from the least contaminated well to the most contaminated well based on historical analytical results and field observation. Glassware will be laboratory supplied, pre-cleaned Samples analyzed for polynuclear aromatic hydrocarbons (PAHs) will be collected in laboratory provided 1 liter amber bottles. Samples for volatile organic hydrocarbons will be collected in 40 mL glass vials with Teflon septa. The sample containers will be labeled with the date and time, sealed with evidence (custody) tape, and stored on ice for shipment to the qualified laboratory.

GROUNDWATER ANALYTICAL METHODS: Groundwater samples will be analyzed for TPH GRO by EPA Method 8015, Volatile Organic Compounds by EPA Method 8260, for EDB by EPA Method 504.1, and for total lead by EPA Method 6010. Should significant total lead be detected, SMA will contact NMOCD to consider additional analysis to speciate organic lead.

WASTE WATER DISPOSAL PROCEDURE: Purged water will be stored in drums for disposal at a properly permitted facility following laboratory analysis for disposal characterization. One composite sample of purged water is included in the cost estimate for analysis for TPH GRO by EPA Method 8015.

SOIL BORING AND MONITORING WELL SURVEYING: Upon completion of drilling activities and construction of monitoring wells, the top of casing elevations and locations of the monitoring wells and the locations of all soil borings will be surveyed to the nearest 0.1 feet with a total station or GPS survey equipment and referenced to a permanent control point or site benchmark established with UTM coordinates. Elevations of the PVC well casing on each monitoring well will be surveyed to a permanent mark and surveyed to the nearest 0.01 feet relative to the site benchmark using an auto level. All well coordinates (x, y, z) shall be supplied in the investigation report. Elevations will be referenced to the closest USGS benchmark so that actual elevations relative to a sea level datum are provided.

TASK 2 – REPORTING

A site investigation report documenting the results of drilling and sampling activities will be



submitted to NMOCD following receipt of laboratory analytical results. Figures included in the investigation report will be as follows:

- Vicinity map based on a USGS Quad Map
- Site map with aerial photograph and utility locations (if any)
- Site map of pertinent water well and monitoring well locations
- Groundwater gradient map
- NAPL thickness contour map, as applicable
- Groundwater contaminant contour maps, as applicable
- Soil boring logs and monitoring well completion diagrams

Tables to be included in the summary letter report will include:

- Depth to Liquids, Depth to Water and Thickness of Hydrocarbon Layer
- Analytical results of groundwater testing
- Results of field screening of drill cuttings

Appendixes to be included in the summary letter report will include:

- Laboratory analytical reports
- Daily Drilling Report notes.
- Field notes

TASK 3 – PERFORMANCE BOND

In compliance with the requirements of the State of New Mexico General Services Department Purchasing Division Price Agreement #10-805-00-07208, SMA will obtain a performance bond for the completion of the above-outlined scope of work at a cost of 3% of the project total fee. An allowance for SMA's administrative costs in securing the bond is also provided in the cost estimate.





Task 1a Drilling - EnviroDrill Fee Schedule: Envirodrill Estimate

Subcontractors				
Enviro-Drill (per estimate)	Qty	Price/Unit	Price	Inc. NMGRT
Drilling (140 total feet w/ five 20 foot completed monitoring wells)	1	\$15,030.00	\$15,030.00	\$16,100.89
SUBTOTAL >>			\$15,030.00	
NMGRT (7.125%) >>			\$1,070.89	
TOTAL			\$16,100.89	
ROUNDUP TOTAL			\$16,200.00	

Task 1b Investigation and Sampling Oversight Fee Schedule: NMDOT Price Agreement

Description	Qty	Each	Sub	Price/Unit	Price
Principal Oversight TOTAL	2	1	2 2	\$140.00	\$280.00
Senier I					
Acquire and review existing reports and other documents from NMOCD,					
site visit, interview local NMOCD Inspector	7	6	42	\$110.00	\$4,620.00
Project Development/oversight TOTAL	5	6	30 72	\$110.00	\$3,300.00
Project I					
Review existing reports and other documents from NMOCD	2	4	8	\$87.00	\$696.00
Access permissions - Jackson and surrounding adjacent	2	2	4	\$87.00	\$348.00
Sampling irrigation wells	2	1	2	\$87.00	\$174.00
Drilling/soil boring sampling oversight	4	10	40	\$87.00	\$3,480.00
Monitoring well sampling, separate mob after well stabilization	1	12	12	\$87.00	\$1,044.00
Subcontractor & NMOCD coordination	3	2	6	\$87.00	\$522.00
Coordination/utility locate with client/One Call	1	1	1	\$87.00	\$87.00
Health & Safety Plan	1	4	4	\$87.00	\$348.00
TOTAL	0	0.5	4 81	<i>ф01.</i> 00	340.00
Survey					
2 Man Crew with GPS for 7 borings with 5 completed as wells			1	\$1,800.00	\$1,800.00
Expenses					
Daily mileage to/from site (1 day site recon, 4 days drilling, 1 day MW					
sampling)	6	24	96	\$0.55	\$52.80
Pick-up/day	6	1	4	\$65.00	\$260.00
Sample shipping			2	\$75.00	\$150.00
PID			4	\$65.00	\$260.00
GPS Disitist Operator			4	\$35.00	\$140.00
Cell Phone			6 6	\$35.00 \$35.00	\$210.00 \$210.00
Subcontractors					
Hall Lab. 2 irrigation well water samples by 8015B for TPH GRO			7	\$45.00	\$315.00
Hall Lab, 2 irrigation well water samples for 6010 for total lead			7	\$30.00	\$210.00
BTEX/MTBE/EDC/EDB/TPH GRO			5	\$140.00	\$700.00
Hall Lab, 5 monitoring well water samples by 6010 for total lead			5	\$30.00	\$150.00
Hall Lab, 7 soil samples from borings and 1 sample for disposal			0	¢45.00	¢405.00
Hall Lab, 7 soil samples from borings, 1 sample for disposal			9	φ40.00	\$405.00
characterization by 6010 for total lead			9	\$30.00	\$270.00
Subtotal					\$20,379,80
NMGRT (7.125%) >>					\$1,452.06
TOTAL					\$21,831.86
Round-up					\$21,900.00

Task 2 Reporting Fee Schedule: NM Price Agreement

Description	Qty	Each	Sub	Price/Unit	Price
Principal					
Proposal/Costs Review	1	1	1	\$140.00	\$140.00
Report Review	1	1	1	\$140.00	\$140.00
TOTAL			2		
Senior I					
Evaluate data, EMNRD coordination	2	2	4	\$110.00	\$440.00
Oversight and report review, recommendations	1	5	5	\$110.00	\$550.00
TOTAL			9		
Project I					
Data Entry	1	4	4	\$87.00	\$348.00
Report Prep.	3	8	24	\$87.00	\$2,088.00
Drafting	3	8	24	\$87.00	\$2,088.00
TOTAL			52		
Admin					
Report assembly, budget tracking & invoicing			5	\$58.00	\$290.00
TOTAL			5		
SUBTOTAL >>					\$6,084.00
Tax (7.125%) >>					\$433.49
TOTAL					\$6,517.49
ROUNDUP TOTAL					\$6,600.00

Task 3 Bond Acquisition Fee Schedule: NM Price Agreement

Description	Qty	Each	Sub	Price/Unit	Price
Principal					
Oversight	1	1	1	\$140.00	\$140.00
Review and execute	1	1	1	\$140.00	\$140.00
TOTAL			2		
Senior I					
Coordination for bond	2	2	4	\$110.00	\$440.00
TOTAL	_	_	4		• • • • • • • •
Admin					
Coordination for bond, interface with bonding agent			4	\$58.00	\$232.00
TOTAL			4		
Admin					
Bond Premium - estimated	1	3.00%		\$40,000.00	\$1,200.00
TOTAL					
SUBTOTAL >>					\$2,152.00
Tax (7.125%) >>					\$153.33
TOTAL					\$2,305.33
ROUNDUP TOTAL					\$2,400.00

Items	Task Description	Number of Units	Subtotal	Total
Task 1a	Drilling: seven 20 ft borings =140 total feet; includes five completed as monitoring wells - EnviroDrill, Inc.			
			NMGRT 7.125%	\$1,070.89
			Total	\$16,100.89
Task 1b	Investigation and Sampling Oversight: review existing documents, workplan prep, HASP prep, property access, notifications, drilling oversight, sampling, survey, laboratory analytical costs	1	\$20,379.80	\$20,379.80
		-	NMGRT 7.125%	\$1,452.06
			Total	\$21,831.86
Task 2	Evaluation, report, and recommendations	1	\$6,084.00	\$6,084.00
			NMGRT 7.125%	\$433.49
			Total	\$6,517.49
Task 3	Bond Acquisition, Bond Premium on estimated total of \$40,000	1	\$2,152.00	\$2,152.00
		•	NMGRT 7.125%	\$153.33
			Total	\$2,305.33
			Grand Total	\$46,755.56



Griswold, Jim, EMNRD

From:	Cindy Gray < cindy.gray@soudermiller.com>
Sent:	Thursday, April 05, 2012 4:25 PM
То:	Griswold, Jim, EMNRD
Subject:	RE: Maverik-Caribou/Roland Jackson

Ok, Jim. I've spoken with Hall Env Labs and the estimated cost for that suite of analyses <u>per NAPL sample</u> would be somewhere between \$1100 and \$1200. Also, in reviewing the final cost table, I don't see an allowance for characterization and disposal of drill cuttings and the development/purge water. So can you also add that to the contingency? Likely less than \$1500 for both drill cuttings and water. Please don't hesitate to call to discuss. Thanks again.

Cindy Gray, CHMM | Souder, Miller & Associates | Senior Scientist 2101 San Juan Blvd., Farmington, NM 87401 | o: 505.325.5667 | c: 505.320.0912 | e: <u>cindy.gray@soudermiller.com</u>

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From: Griswold, Jim, EMNRD [mailto:Jim.Griswold@state.nm.us] Sent: Thursday, April 05, 2012 9:36 AM To: Cindy Gray Subject: RE: Maverik-Caribou/Roland Jackson

Do not revise the proposal. I will add contingent monies to the purchase order which can cover this. Just give me a reasonable estimate for the cost. To my knowledge, OCD does not have any prior analysis of released materials. I do have some product from Jackson's well gathered by OCD staff a few years back. Maverik also had some fingerprinting done on a product sample form the same well gathered last year. Perhaps we can look at variability over time to see degradation rates and/or if the composition changes to the point it is indicative of someone spiking the well.

Jim

From: Cindy Gray [mailto:cindy.gray@soudermiller.com] Sent: Wednesday, April 04, 2012 11:17 AM To: Griswold, Jim, EMNRD Subject: Maverik-Caribou/Roland Jackson

Hi, Jim! I was just going back through my notes from our original conversation and realized we left out any reference to or cost of fingerprinting of the product in the well. Do you want me to revise the proposal and estimated costs to include that or wait until we all know a bit more? Also, does OCD have a record/reference fingerprint of the refinery's product that was recorded as released? Regards,

Cindy Gray, CHMM | Souder, Miller & Associates | Senior Scientist 2101 San Juan Blvd., Farmington, NM 87401 | o: 505.325.5667 | c: 505.320.0912 | e: <u>cindy.gray@soudermiller.com</u>

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 Total PO Amount
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STATE OF NEW MEXICO GENERAL SERVICES DEPARTMENT- PURCHASING DIVISION TERMS AND CONDITIONS UNLESS OTHERWISE SPECIFIED

- 1. GENERAL: When the State Purchasing Agent issues a purchase document in response to the Vendors bid, a binding contract is created.
- VARIATION IN QUANTITY: No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowances in manufacturing process, and then only to the extent, if any, specified elsewhere in this order.
 ASSIGNMENT:
 - A: Neither the order, nor any interest therein, nor claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in subparagraph 3B below or as expressly authorized in writing by the STATE PURCHASASING AGENTS OFFICE. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
 - B: Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the State as to goods, services, and materials purchased in connection with this bid are hereby assigned to the State.
- 4. STATE FURNISHED PROPERTY: State furnished property shall be returned to the state upon request in the same condition as received except for ordinary wear, tear, and modifications ordered hereunder.
- DISCOUNTS: Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within 20 days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise or invoice, whichever is later.
- 6. INSPECTION: Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for non-conformance with specifications shall be removed, at the Vendors risk and expense, promptly after notice of rejection.
- 7. INSPECTION OF PLANT: The State Purchasing Agent may inspect, at any reasonable time, the part of the contractors, or any subcontractors plant or place of business, which is related to the performance of this contract.
- 8. COMMERCIAL WARARANTY: The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives to any customer for such supplies or services, and that the rights and remedies provided herein shall extend to the State and are in addition to and do not limit any rights afforded to the State by any other cause of this order. Vendor agrees not to disclaim warranties of fitness for a particular purpose or merchantability.
- 9. TAXES: The unit price shall exclude all State taxes.
- 10. PACKING, SHIPPING AND INVOICING:
 - A: The States purchase document number and the Vendors name, users name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipment. The users count will be accepted by the Vendor as final and conclusive on all shipments not accompanied by a packing ticket.
 - B: The Vendors invoice shall be submitted in triplicate, duly certified and shall contain the following information: order number, description of supplies or services, quantities, unit prices and extended totals. Separate invoices shall be rendered for each and every complete shipment.
- C: Invoices must be submitted to the using agency and NOT THE STATE PURCHASING AGENT.
- 11. DEFAULT: The State reserves the right to cancel all or any part of this order without cost to the State, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, to hold the Vendor liable for any excess cost occasioned by the State due to the Vendors default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of the Vendor, such causes include, but are not restricted to, acts of God or of the public enemy, acts of the State or of the Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargos, unusually severe weather and defaults of subcontractors due to any of the above, unless the State shall determine that the supplies or services to be furnished by the subcontractor where obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights and remedies of the State provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.
- 12. NON-COLLUSION: In signing this bid, the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this proposal submitted to the State Purchasing Agent.
- 13. NON-DISCRIMINATION: Vendors doing business with the State of New Mexico must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of that Act, Rev., 1979.
- 14. THE PROCUREMENT CODE: Sections 13-1-28 through 13-1-199 NMSA 1978 imposes civil and criminal penalties for its violation.
- In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.
- 15. All bid items are to be NEW and most current production, unless otherwise specified.
- 16. PAYMENT FOR PURCHASES: Except as otherwise agreed to: late payment charges may be assessed against the user state agency in the amount and under the conditions set forth in section 13-14158 NMSA 1978.
- 17. WORKERS COMPENSATION: The Contractor agrees to comply with state laws and rules pertaining to workers compensation benefits for its employees. If the Contractor fails to comply with Workers Compensation Act and applicable rules when required to do so, this (Agreement) may be terminated by the contracting agency.
- 18. PAY EQUITY RECORDING: The Contractor agrees to comply with New Mexico Pay Equity reporting requirements as detailed in Executive Order 2009-049 Implementation Guidance available at http://www.generalservices.state.nm.us/spd/guidance.pdf

Oil and Gas Reclamation Fund Oil Conservation Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Santa Fe, New Mexico 87505

CONSENT TO ENTRY FOR INVESTIGATION, F	RECLAMATION, & MONITORING
Groundwater investigation	PROJECT
San Juan County	COUNTY (IES)
G, 17, 29N, 14W UNIT LETTER, SECTION	, TOWNSHIP, RANGE

Pursuant to Chapter 70, Article 2, Section 38 of the Oil and Gas Act, the Director of the Oil Conservation Division (OCD) proposes to utilize the Oil and Gas Reclamation Fund in order to restore and remediate abandoned well sites and associated production facilities to protect public health and the environment.

To achieve this objective, it will be necessary for OCD, its employees, agents, and contractors to enter upon the property described below:

Residential Properties located at #18 & #20 Road 6271 Kirtland NM

A(n) Deeded _, interest in such property is held by Jackson Roland E and Gloria (name of interest holder). Such interest was acquired by Deed (deed, patent, etc.) as recorded in Book ^{1050 and 1368}/ page(s) 206 & 853 , in San Juan County Assessor's records.

NOW, THEREFORE, in consideration of the benefits that will accrue to the Interest Holder and to the general public, the Interest Holder does hereby grant to the OCD, its employees, agents, contractors, and subcontractors a right of entry into, over, and upon the property described above, including all necessary and convenient rights of ingress, egress, and regress, with all materials and equipment necessary to conduct the proposed investigation and reclamation activities and to do any and all things necessary and convenient to effectively carry on said activities in a good and workmanlike manner, including but not limited to the temporary storage of equipment and materials, the right to remove or dispose of materials necessary to conduct the property is granted to complete the reclamation activities and to conduct inspections of, and perform maintenance and repairs to, the reclamation activities completed on the property.

The Interest Holder understands and acknowledges that the success of the project cannot be warranted and the proposed work may not accomplish the intended result. The Interest Holder also acknowledges

04/2012

that the OCD has no responsibility or liability for any oil and gas related damage to the property that occurred prior to or that might occur during or after the reclamation work.

It is understood the work performed in the project area shall be done by contractors for the OCD and the OCD is without authority to assume the risk of injury to persons or damage to persons or property resulting from the action of the contractors, however the OCD shall require contractors performing the work on the property to obtain and keep in force liability insurance in the minimum amount of \$1,000,000 per occurrence and \$2,000,000 per aggregrate.

Execution of this Consent to Entry does not obligate OCD to perform any part of the contemplated or proposed reclamation work.

Interest Holder agrees that any sale, assignment, mortgage, or other encumbrance or conveyance of this property shall be made subject to this Consent to Entry. Additionally, Interest Holder agrees to provide written notice to the OCD ten (10) days in advance of any such event.

Witness my hand or seal this <u>30th</u>	day of	April	_20_ <u>/2</u>
	 Się	<u>Reland</u> E. gnature of Interest I	Jucho-
ACK	IOWLEDGEMENT		
STATE OF <u>New Mexico</u>) COUNTY OF <u>San Juan</u>) The foregoing Consent to Entry was acknowled by <u>Roland E. Jackson</u>	lged before me this _	<u>30th</u> day of <u>Apri</u>	<u> </u>
My commission expires: 2-22-2016 (Seal) OFFICIAL BEAL PAMELIA SHIRLEY NOTARY PUBLIC STATE OF NEW MEXICO STATE OF) COUNTY OF	Notary Public	Shirley.	
The foregoing Consent to Entry was acknowled	ged before me this	day of	. 20
by (name of Ir	terest Holder) the _	,	(title)
of (name of C	orporation) a	(state) co	rporation.
My commission expires:			
(Seal)	Notary Public		

04/2012

Griswold, Jim, EMNRD

From: Sent: To: Cc: Subject: Griswold, Jim, EMNRD Friday, May 18, 2012 1:40 PM 'Denny Foust' Powell, Brandon, EMNRD RE: Maverik-Roland jackson Workplan

Denny,

This change in scope was verbally approved by me during an earlier discussion with Brandon. Costs associated with the well are allowable under the approved purchase order. However, installation of a monitoring well on the adjacent property to the east (where we were not able to gain access) as originally planned should NOT be attempted. This was simply a change in well location, not approval for the installation of an additional well. The approved cost under the purchase order will not be changed. OCD has no preference with respect to sample preservative. Please continue to use your best professional judgment.

Jim Griswold

Senior Hydrologist EMNRD/Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505.476.3465 email: jim.griswold@state.nm.us

From: Denny Foust [mailto:denny.foust@soudermiller.com]
Sent: Friday, May 18, 2012 11:02 AM
To: Griswold, Jim, EMNRD
Cc: Powell, Brandon, EMNRD
Subject: Maverik-Roland jackson Workplan

Jim:

SMA has completed monitoring well #5 at a new location on the Roland Jackson Property approximately 25 feet E-NE of the existing hydrocarbon impacted water well. SMA took this action at the direction of Brandon Powell, NMOCD Aztec office. My accounting people are requesting an e-mail confirmation of this action from you to be included with the billing in addition to Brandon Powell's e-mail directive.

Currently all five wells are completed and developed plus the two soil borings are done. Sampling is scheduled for next week. Does NMOCD prefer HCL or HgCl2 preservative in the samples SMA will be sending to Hall Environmental for analysis?

Denny Foust Senior Geologist Souder, Miller & Associates <u>denny.foust@soudermiller.com</u> 505-325-5667 (office) 505-801-9727 (cell) 505-327-1496 (fax)

Griswold, Jim, EMNRD

From:	Cindy Gray <cindy.gray@soudermiller.com></cindy.gray@soudermiller.com>
Sent:	Tuesday, June 12, 2012 4:02 PM
То:	Griswold, Jim, EMNRD
Cc:	'Shawna Chubbuck'; denny.foust@soudermiller.com
Subject:	Free product confirmed on Mr. Jackson's well today
Attachments:	WATER Rpt_1205A69_v1.pdf

Hi, Jim! Today Shawna found NAPL on Mr. Jackson's irrigation well. As discussed, she pulled a sample of the liquid and we have it in custody. In the original workplan, we agreed that, if NAPL were encountered in any of the wells, SMA would notify NMOCD and discuss the next step. Jonathan Kelly of the Aztec NMOCD office was with Shawna at the time and is aware of the finding. As we discussed on the phone, none of the monitoring wells are exhibiting anything other than low levels of Total Lead by Method 6010B in all 5 monitoring wells (analytical report attached).

In the past, you have mentioned "fingerprint analysis" of the NAPL and also of the older NAPL sample you have. Since we are approaching the FY end very soon, and fingerprinting requires some time, how would you like to proceed?

Cindy Gray, CHMM Senior Scientist Souder, Miller & Associates 2101 San Juan Blvd, Farmington, NM 87401 O(505)325-5667 F(505)326-0045 C(505) 320-0912

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June 06, 2012

Reid Allan Souder, Miller and Associates 2101 San Juan Boulevard Farmington, NM 87401 TEL: (505) 325-5667 FAX (505) 327-1496

RE: Maverik/Jackson OCD

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

OrderNo.: 1205A69

Dear Reid Allan:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/25/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/6/2012

CLIENT:	Souder, Miller and Associates			(Client Sample	ID: J6	
Project:	Maverik/Jackson OCD				Collection D	ate: 5/23/20	12 1:57:00 PM
Lab ID:	1205A69-001	Matrix:	AQUEO	JS	Received D	ate: 5/25/20	12 10:25:00 AM
Analyzac		Docult	DI	Ouol	Unite	DF	Data Analyzad

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8011/504.1: EDB					Analyst: LRW
1,2-Dibromoethane	ND	0.010	μg/L	1	5/29/2012 4:24:07 PM
EPA METHOD 8015B: GASOLINE RAM	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.10	ma/L	2	5/31/2012 7:39:02 PM
Surr: BFB	95.1	69.3-120	%REC	2	5/31/2012 7:39:02 PM
EPA 6010B: TOTAL RECOVERABLE	IETALS				Analyst: JLF
Lead	0.16	0.050	mg/L	5	6/1/2012 3:49:10 PM
EPA METHOD 8260B: VOLATILES					Analyst: MMS
Benzene	ND	2.0	ua/l	2	5/30/2012 5:38:43 PM
Toluene	ND	2.0	µg/=	2	5/30/2012 5:38:43 PM
Fthylbenzene	ND	2.0	µg/=	2	5/30/2012 5:38:43 PM
Methyl tert-butyl ether (MTBF)	ND	2.0	µg/=	2	5/30/2012 5:38:43 PM
1.2.4-Trimethylbenzene	ND	2.0	µg/= ua/L	2	5/30/2012 5:38:43 PM
1.3.5-Trimethylbenzene	ND	2.0	µa/L	2	5/30/2012 5:38:43 PM
1.2-Dichloroethane (EDC)	ND	2.0	µa/L	2	5/30/2012 5:38:43 PM
1.2-Dibromoethane (EDB)	ND	2.0	µa/L	2	5/30/2012 5:38:43 PM
Naphthalene	ND	4.0	µa/L	2	5/30/2012 5:38:43 PM
1-Methylnaphthalene	ND	8.0	µa/L	2	5/30/2012 5:38:43 PM
2-Methylnaphthalene	ND	8.0	ua/L	2	5/30/2012 5:38:43 PM
Acetone	ND	20	µa/L	2	5/30/2012 5:38:43 PM
Bromobenzene	ND	2.0	µa/L	2	5/30/2012 5:38:43 PM
Bromodichloromethane	ND	2.0	µa/L	2	5/30/2012 5:38:43 PM
Bromoform	ND	2.0	ua/L	2	5/30/2012 5:38:43 PM
Bromomethane	ND	6.0	ua/L	2	5/30/2012 5:38:43 PM
2-Butanone	ND	20	ua/L	2	5/30/2012 5:38:43 PM
Carbon disulfide	ND	20	ua/L	2	5/30/2012 5:38:43 PM
Carbon Tetrachloride	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Chlorobenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Chloroethane	ND	4.0	µg/L	2	5/30/2012 5:38:43 PM
Chloroform	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Chloromethane	ND	6.0	μg/L	2	5/30/2012 5:38:43 PM
2-Chlorotoluene	ND	2.0	μg/L	2	5/30/2012 5:38:43 PM
4-Chlorotoluene	ND	2.0	μg/L	2	5/30/2012 5:38:43 PM
cis-1,2-DCE	ND	2.0	μg/L	2	5/30/2012 5:38:43 PM
cis-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,2-Dibromo-3-chloropropane	ND	4.0	µg/L	2	5/30/2012 5:38:43 PM
Dibromochloromethane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Dibromomethane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,2-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,3-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,4-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.

> Е Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits В Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

1205A69-001

Maverik/Jackson OCD

Project:

Lab ID:

Client Sample ID: J6 Collection Date: 5/23/2012 1:57:00 PM Matrix: AQUEOUS Received Date: 5/25/2012 10:25:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: MMS
Dichlorodifluoromethane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,1-Dichloroethane	ND	2.0	μg/L	2	5/30/2012 5:38:43 PM
1,1-Dichloroethene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,2-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,3-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
2,2-Dichloropropane	ND	4.0	µg/L	2	5/30/2012 5:38:43 PM
1,1-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Hexachlorobutadiene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
2-Hexanone	ND	20	µg/L	2	5/30/2012 5:38:43 PM
Isopropylbenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
4-Isopropyltoluene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
4-Methyl-2-pentanone	ND	20	µg/L	2	5/30/2012 5:38:43 PM
Methylene Chloride	ND	6.0	µg/L	2	5/30/2012 5:38:43 PM
n-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
n-Propylbenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
sec-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Styrene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
tert-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,1,2,2-Tetrachloroethane	ND	4.0	µg/L	2	5/30/2012 5:38:43 PM
Tetrachloroethene (PCE)	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
trans-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
trans-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,2,3-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,1,1-Trichloroethane	ND	2.0	μg/L	2	5/30/2012 5:38:43 PM
1,1,2-Trichloroethane	ND	2.0	μg/L	2	5/30/2012 5:38:43 PM
Trichloroethene (TCE)	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Trichlorofluoromethane	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
1,2,3-Trichloropropane	ND	4.0	µg/L	2	5/30/2012 5:38:43 PM
Vinyl chloride	ND	2.0	µg/L	2	5/30/2012 5:38:43 PM
Xylenes, Total	ND	3.0	µg/L	2	5/30/2012 5:38:43 PM
Surr: 1,2-Dichloroethane-d4	107	70-130	%REC	2	5/30/2012 5:38:43 PM
Surr: 4-Bromofluorobenzene	113	70-130	%REC	2	5/30/2012 5:38:43 PM
Surr: Dibromofluoromethane	86.8	69.8-130	%REC	2	5/30/2012 5:38:43 PM
Surr: Toluene-d8	101	70-130	%REC	2	5/30/2012 5:38:43 PM

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/6/2012

	C C	
Matrix: A	OUEOUS Received I	Date: 5/25/2012 10:25:00 AN
n OCD	Collection 1	Date: 5/23/2012 3:41:00 PM
nd Associates	Client Sampl	le ID: J3
r	nd Associates OCD Matrix: A	nd Associates Client Samp OCD Collection Matrix: AQUEQUS Received

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8011/504.1: EDB					Analyst: LRW
1,2-Dibromoethane	ND	0.010	µg/L	1	5/29/2012 4:36:48 PM
EPA METHOD 8015B: GASOLINE RAM	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.10	ma/L	2	5/31/2012 8:09:55 PM
Surr: BFB	79.8	69.3-120	%REC	2	5/31/2012 8:09:55 PM
EPA 6010B: TOTAL RECOVERABLE	IETALS				Analyst: JLF
Lead	0.16	0.050	mg/L	5	6/4/2012 1:54:08 PM
EPA METHOD 8260B: VOLATILES			-		Analyst: MMS
Benzene	ND	2.0	ua/L	2	5/30/2012 6:08:12 PM
Toluene	ND	2.0	ua/L	2	5/30/2012 6:08:12 PM
Ethylbenzene	ND	2.0	ua/L	2	5/30/2012 6:08:12 PM
Methyl tert-butyl ether (MTBE)	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
1.2.4-Trimethylbenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
1,3,5-Trimethylbenzene	ND	2.0	μg/L	2	5/30/2012 6:08:12 PM
1,2-Dichloroethane (EDC)	ND	2.0	μg/L	2	5/30/2012 6:08:12 PM
1,2-Dibromoethane (EDB)	ND	2.0	μg/L	2	5/30/2012 6:08:12 PM
Naphthalene	ND	4.0	µg/L	2	5/30/2012 6:08:12 PM
1-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 6:08:12 PM
2-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 6:08:12 PM
Acetone	ND	20	µg/L	2	5/30/2012 6:08:12 PM
Bromobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Bromodichloromethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Bromoform	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Bromomethane	ND	6.0	µg/L	2	5/30/2012 6:08:12 PM
2-Butanone	ND	20	µg/L	2	5/30/2012 6:08:12 PM
Carbon disulfide	ND	20	µg/L	2	5/30/2012 6:08:12 PM
Carbon Tetrachloride	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Chlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Chloroethane	ND	4.0	µg/L	2	5/30/2012 6:08:12 PM
Chloroform	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Chloromethane	ND	6.0	µg/L	2	5/30/2012 6:08:12 PM
2-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
4-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
cis-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
cis-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
1,2-Dibromo-3-chloropropane	ND	4.0	µg/L	2	5/30/2012 6:08:12 PM
Dibromochloromethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
Dibromomethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
1,2-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
1,3-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM
1,4-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.

> Е Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits В Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

S

Maverik/Jackson OCD

Project:

Client Sample ID: J3 Collection Date: 5/23/2012 3:41:00 PM

Lab ID: 1205A69-002	Matrix:	AQUEOUS	Received Date: 5/25/2012 10:25:00 AM			
Analyses	Result	RL Qual	Units	DF	Date Analyzed	
EPA METHOD 8260B: VOLATILES					Analyst: MMS	
Dichlorodifluoromethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1-Dichloroethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1-Dichloroethene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,2-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,3-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
2,2-Dichloropropane	ND	4.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
Hexachlorobutadiene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
2-Hexanone	ND	20	µg/L	2	5/30/2012 6:08:12 PM	
Isopropylbenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
4-Isopropyltoluene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
4-Methyl-2-pentanone	ND	20	µg/L	2	5/30/2012 6:08:12 PM	
Methylene Chloride	ND	6.0	µg/L	2	5/30/2012 6:08:12 PM	
n-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
n-Propylbenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
sec-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
Styrene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
tert-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1,2,2-Tetrachloroethane	ND	4.0	µg/L	2	5/30/2012 6:08:12 PM	
Tetrachloroethene (PCE)	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
trans-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
trans-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,2,3-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1,1-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,1,2-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
Trichloroethene (TCE)	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
Trichlorofluoromethane	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
1,2,3-Trichloropropane	ND	4.0	µg/L	2	5/30/2012 6:08:12 PM	
Vinyl chloride	ND	2.0	µg/L	2	5/30/2012 6:08:12 PM	
Xylenes, Total	ND	3.0	µg/L	2	5/30/2012 6:08:12 PM	
Surr: 1,2-Dichloroethane-d4	104	70-130	%REC	2	5/30/2012 6:08:12 PM	
Surr: 4-Bromofluorobenzene	109	70-130	%REC	2	5/30/2012 6:08:12 PM	
Surr: Dibromofluoromethane	90.0	69.8-130	%REC	2	5/30/2012 6:08:12 PM	
Surr: Toluene-d8	100	70-130	%REC	2	5/30/2012 6:08:12 PM	

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/6/2012

CLIENT:	Souder, Miller and Associates		С	lient Samp	le ID: J4	
Project:	Maverik/Jackson OCD			Collection	Date: 5/24/20	12 9:50:00 AM
Lab ID:	1205A69-003	Matrix:	AQUEOUS	Received	Date: 5/25/20	12 10:25:00 AM
Analyses		Result	RL Qual	Units	DF	Date Analyzed

Analyses	Ktsuit	KL Qu	ai Units	DI	Date Analyzeu
EPA METHOD 8011/504.1: EDB					Analyst: LRW
1,2-Dibromoethane	ND	0.010	µg/L	1	5/29/2012 4:49:28 PM
EPA METHOD 8015B: GASOLINE RAM	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.10	mg/L	2	6/1/2012 12:46:14 AM
Surr: BFB	77.6	69.3-120	%REC	2	6/1/2012 12:46:14 AM
EPA 6010B: TOTAL RECOVERABLE	METALS				Analyst: JLF
Lead	0.049	0.010	mg/L	1	6/1/2012 3:17:50 PM
EPA METHOD 8260B: VOLATILES					Analyst: MMS
Benzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
Toluene	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
Ethylbenzene	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
Methyl tert-butyl ether (MTBE)	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
1,2,4-Trimethylbenzene	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
1,2-Dichloroethane (EDC)	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
1,2-Dibromoethane (EDB)	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
Naphthalene	ND	4.0	μg/L	2	5/30/2012 6:37:44 PM
1-Methylnaphthalene	ND	8.0	μg/L	2	5/30/2012 6:37:44 PM
2-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 6:37:44 PM
Acetone	ND	20	μg/L	2	5/30/2012 6:37:44 PM
Bromobenzene	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
Bromodichloromethane	ND	2.0	μg/L	2	5/30/2012 6:37:44 PM
Bromoform	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
Bromomethane	ND	6.0	µg/L	2	5/30/2012 6:37:44 PM
2-Butanone	ND	20	µg/L	2	5/30/2012 6:37:44 PM
Carbon disulfide	ND	20	µg/L	2	5/30/2012 6:37:44 PM
Carbon Tetrachloride	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
Chlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
Chloroethane	ND	4.0	µg/L	2	5/30/2012 6:37:44 PM
Chloroform	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
Chloromethane	ND	6.0	µg/L	2	5/30/2012 6:37:44 PM
2-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
4-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
cis-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
cis-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
1,2-Dibromo-3-chloropropane	ND	4.0	µg/L	2	5/30/2012 6:37:44 PM
Dibromochloromethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
Dibromomethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
1,2-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
1,3-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM
1,4-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.

> Е Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits В Analyte detected in the associated Method Blank

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Maverik/Jackson OCD

Project:

Client Sample ID: J4 Collection Date: 5/24/2012 9:50:00 AM Received Date: 5/25/2012 10:25:00 AM

Lab ID: 1205A69-003	Matrix:	AQUEOUS	Received I	Received Date: 5/25/2012 10:25:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8260B: VOLATILES					Analyst: MMS		
Dichlorodifluoromethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1-Dichloroethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1-Dichloroethene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,2-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,3-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
2,2-Dichloropropane	ND	4.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
Hexachlorobutadiene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
2-Hexanone	ND	20	µg/L	2	5/30/2012 6:37:44 PM		
Isopropylbenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
4-Isopropyltoluene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
4-Methyl-2-pentanone	ND	20	µg/L	2	5/30/2012 6:37:44 PM		
Methylene Chloride	ND	6.0	µg/L	2	5/30/2012 6:37:44 PM		
n-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
n-Propylbenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
sec-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
Styrene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
tert-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1,2,2-Tetrachloroethane	ND	4.0	µg/L	2	5/30/2012 6:37:44 PM		
Tetrachloroethene (PCE)	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
trans-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
trans-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,2,3-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1,1-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,1,2-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
Trichloroethene (TCE)	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
Trichlorofluoromethane	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
1,2,3-Trichloropropane	ND	4.0	µg/L	2	5/30/2012 6:37:44 PM		
Vinyl chloride	ND	2.0	µg/L	2	5/30/2012 6:37:44 PM		
Xylenes, Total	ND	3.0	µg/L	2	5/30/2012 6:37:44 PM		
Surr: 1,2-Dichloroethane-d4	106	70-130	%REC	2	5/30/2012 6:37:44 PM		
Surr: 4-Bromofluorobenzene	111	70-130	%REC	2	5/30/2012 6:37:44 PM		
Surr: Dibromofluoromethane	91.6	69.8-130	%REC	2	5/30/2012 6:37:44 PM		
Surr: Toluene-d8	102	70-130	%REC	2	5/30/2012 6:37:44 PM		

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

S Spike Recovery outside accepted recovery limits

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/6/2012

CLIENT:	Souder, Miller and Associates		Client Sample ID: J8
Project:	Maverik/Jackson OCD		Collection Date: 5/24/2012 10:44:00 AM
Lab ID:	1205A69-004	Matrix: AQUEOUS	Received Date: 5/25/2012 10:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8011/504.1: EDB					Analyst: LRW
1,2-Dibromoethane	ND	0.010	µg/L	1	5/29/2012 5:02:07 PM
EPA METHOD 8015B: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.10	mg/L	2	6/1/2012 1:17:03 AM
Surr: BFB	98.4	69.3-120	%REC	2	6/1/2012 1:17:03 AM
EPA 6010B: TOTAL RECOVERABLE N	IETALS				Analyst: JLF
Lead	0.22	0.050	mg/L	5	6/4/2012 2:10:27 PM
EPA METHOD 8260B: VOLATILES					Analyst: MMS
Benzene	ND	2.0	ua/L	2	5/30/2012 7:07:06 PM
Toluene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Ethylbenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Methyl tert-butyl ether (MTBE)	ND	2.0	µ⊴,∟ µa/L	2	5/30/2012 7:07:06 PM
1.2.4-Trimethylbenzene	ND	2.0	µ⊴,∟ µa/L	2	5/30/2012 7:07:06 PM
1.3.5-Trimethylbenzene	ND	2.0	µ⊴,∟ µa/L	2	5/30/2012 7:07:06 PM
1.2-Dichloroethane (EDC)	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
1.2-Dibromoethane (EDB)	ND	2.0	µ⊴,∟ µa/L	2	5/30/2012 7:07:06 PM
Naphthalene	ND	4.0	µg/L	2	5/30/2012 7:07:06 PM
1-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 7:07:06 PM
2-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 7:07:06 PM
Acetone	ND	20	µg/L	2	5/30/2012 7:07:06 PM
Bromobenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Bromodichloromethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Bromoform	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Bromomethane	ND	6.0	µg/L	2	5/30/2012 7:07:06 PM
2-Butanone	ND	20	µ⊴,∟ µa/L	2	5/30/2012 7:07:06 PM
Carbon disulfide	ND	20	µg/L	2	5/30/2012 7:07:06 PM
Carbon Tetrachloride	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Chlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Chloroethane	ND	4.0	µg/L	2	5/30/2012 7:07:06 PM
Chloroform	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
Chloromethane	ND	6.0	ua/L	2	5/30/2012 7:07:06 PM
2-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
4-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
cis-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
cis-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM
1.2-Dibromo-3-chloropropane	ND	4.0	µg/L	2	5/30/2012 7:07:06 PM
Dibromochloromethane	ND	2.0	μg/L	2	5/30/2012 7:07:06 PM
Dibromomethane	ND	2.0	μg/L	2	5/30/2012 7:07:06 PM
1,2-Dichlorobenzene	ND	2.0	μg/L	2	5/30/2012 7:07:06 PM
1,3-Dichlorobenzene	ND	2.0	μg/L	2	5/30/2012 7:07:06 PM
1,4-Dichlorobenzene	ND	2.0	μg/L	2	5/30/2012 7:07:06 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Maverik/Jackson OCD

Client Sample ID: J8 Collection Date: 5/24/2012 10:44:00 AM Presived Date: 5/25/2012 10:25:00 AM

Lab ID: 1205A69-004	Matrix:	AQUEOUS	Received D	Received Date: 5/25/2012 10:25:00 AM			
Analyses	Result	RL Qua	l Units	DF	Date Analyzed		
EPA METHOD 8260B: VOLATILES					Analyst: MMS		
Dichlorodifluoromethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1-Dichloroethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1-Dichloroethene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,2-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,3-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
2,2-Dichloropropane	ND	4.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
Hexachlorobutadiene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
2-Hexanone	ND	20	µg/L	2	5/30/2012 7:07:06 PM		
Isopropylbenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
4-Isopropyltoluene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
4-Methyl-2-pentanone	ND	20	µg/L	2	5/30/2012 7:07:06 PM		
Methylene Chloride	ND	6.0	µg/L	2	5/30/2012 7:07:06 PM		
n-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
n-Propylbenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
sec-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
Styrene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
tert-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1,2,2-Tetrachloroethane	ND	4.0	µg/L	2	5/30/2012 7:07:06 PM		
Tetrachloroethene (PCE)	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
trans-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
trans-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,2,3-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1,1-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,1,2-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
Trichloroethene (TCE)	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
Trichlorofluoromethane	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
1,2,3-Trichloropropane	ND	4.0	µg/L	2	5/30/2012 7:07:06 PM		
Vinyl chloride	ND	2.0	µg/L	2	5/30/2012 7:07:06 PM		
Xylenes, Total	ND	3.0	µg/L	2	5/30/2012 7:07:06 PM		
Surr: 1,2-Dichloroethane-d4	107	70-130	%REC	2	5/30/2012 7:07:06 PM		
Surr: 4-Bromofluorobenzene	112	70-130	%REC	2	5/30/2012 7:07:06 PM		
Surr: Dibromofluoromethane	91.6	69.8-130	%REC	2	5/30/2012 7:07:06 PM		
Surr: Toluene-d8	103	70-130	%REC	2	5/30/2012 7:07:06 PM		

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

S Spike Recovery outside accepted recovery limits

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/6/2012

CLIENT: Souder, Miller and As	sociates		Client Sampl	e ID: J7	
Project: Maverik/Jackson OCI)		Collection I	Date: 5/24/20	012 11:36:00 AM
Lab ID: 1205A69-005	Matrix:	AQUEOUS	Received I	Date: 5/25/20	012 10:25:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8011/504.1: EDB	6				Analyst: LRW
1,2-Dibromoethane	ND	0.010	μg/L	1	5/29/2012 5:14:51 PM
EPA METHOD 8015B: GASOLI	NE RANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.10	mg/L	2	6/1/2012 1:47:55 AM
Surr: BFB	71.4	69.3-120	%REC	2	6/1/2012 1:47:55 AM
EPA 6010B: TOTAL RECOVER	ABLE METALS				Analyst: JLF
Lead	0.31	0.050	mg/L	5	6/4/2012 2:14:01 PM
EPA METHOD 8260B: VOLATI	LES				Analyst: MMS
Benzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Toluene	ND	2.0	ua/l	2	5/30/2012 7·36·28 PM

Eodd	0.01	0.000	ing, E	Ũ	0/ 1/2012 2:11:0111
EPA METHOD 8260B: VOLATILES					Analyst: MMS
Benzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Toluene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Ethylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Methyl tert-butyl ether (MTBE)	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,2-Dichloroethane (EDC)	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Naphthalene	ND	4.0	µg/L	2	5/30/2012 7:36:28 PM
1-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 7:36:28 PM
2-Methylnaphthalene	ND	8.0	µg/L	2	5/30/2012 7:36:28 PM
Acetone	ND	20	µg/L	2	5/30/2012 7:36:28 PM
Bromobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Bromodichloromethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Bromoform	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Bromomethane	ND	6.0	µg/L	2	5/30/2012 7:36:28 PM
2-Butanone	ND	20	µg/L	2	5/30/2012 7:36:28 PM
Carbon disulfide	ND	20	µg/L	2	5/30/2012 7:36:28 PM
Carbon Tetrachloride	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Chlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Chloroethane	ND	4.0	µg/L	2	5/30/2012 7:36:28 PM
Chloroform	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Chloromethane	ND	6.0	µg/L	2	5/30/2012 7:36:28 PM
2-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
4-Chlorotoluene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
cis-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
cis-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,2-Dibromo-3-chloropropane	ND	4.0	µg/L	2	5/30/2012 7:36:28 PM
Dibromochloromethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
Dibromomethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,2-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,3-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM
1,4-Dichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

В Analyte detected in the associated Method Blank

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Maverik/Jackson OCD

Client Sample ID: J7 Collection Date: 5/24/2012 11:36:00 AM Received Date: 5/25/2012 10:25:00 AM

Lab ID: 1205A69-005	Matrix:	AQUEOUS	Received Date: 5/25/2012 10:25:00 AM			
Analyses	Result	RL Qual	Units	DF	Date Analyzed	
EPA METHOD 8260B: VOLATILES					Analyst: MMS	
Dichlorodifluoromethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1-Dichloroethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1-Dichloroethene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,2-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,3-Dichloropropane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
2,2-Dichloropropane	ND	4.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
Hexachlorobutadiene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
2-Hexanone	ND	20	µg/L	2	5/30/2012 7:36:28 PM	
Isopropylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
4-Isopropyltoluene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
4-Methyl-2-pentanone	ND	20	µg/L	2	5/30/2012 7:36:28 PM	
Methylene Chloride	ND	6.0	µg/L	2	5/30/2012 7:36:28 PM	
n-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
n-Propylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
sec-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
Styrene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
tert-Butylbenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1,2,2-Tetrachloroethane	ND	4.0	µg/L	2	5/30/2012 7:36:28 PM	
Tetrachloroethene (PCE)	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
trans-1,2-DCE	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
trans-1,3-Dichloropropene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,2,3-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1,1-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,1,2-Trichloroethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
Trichloroethene (TCE)	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
Trichlorofluoromethane	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
1,2,3-Trichloropropane	ND	4.0	µg/L	2	5/30/2012 7:36:28 PM	
Vinyl chloride	ND	2.0	µg/L	2	5/30/2012 7:36:28 PM	
Xylenes, Total	ND	3.0	µg/L	2	5/30/2012 7:36:28 PM	
Surr: 1,2-Dichloroethane-d4	106	70-130	%REC	2	5/30/2012 7:36:28 PM	
Surr: 4-Bromofluorobenzene	111	70-130	%REC	2	5/30/2012 7:36:28 PM	
Surr: Dibromofluoromethane	90.3	69.8-130	%REC	2	5/30/2012 7:36:28 PM	
Surr: Toluene-d8	107	70-130	%REC	2	5/30/2012 7:36:28 PM	

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

S Spike Recovery outside accepted recovery limits

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Analytical Report Lab Order 1205A69 Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: Trip Blank Collection Date:

Project: Maverik/Jackson OCD Lab ID: 1205A69-006

Matrix: TRIP BLANK Received Date: 5/25/2012 10:25:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8011/504.1: EDB					Analyst: LRW
1,2-Dibromoethane	ND	0.010	µg/L	1	5/29/2012 5:40:25 PM
EPA METHOD 8260B: VOLATILES					Analyst: MMS
Benzene	ND	1.0	μg/L	1	5/30/2012 8:05:52 PM
Toluene	ND	1.0	μg/L	1	5/30/2012 8:05:52 PM
Ethylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	5/30/2012 8:05:52 PM
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Naphthalene	ND	2.0	µg/L	1	5/30/2012 8:05:52 PM
1-Methylnaphthalene	ND	4.0	µg/L	1	5/30/2012 8:05:52 PM
2-Methylnaphthalene	ND	4.0	µg/L	1	5/30/2012 8:05:52 PM
Acetone	ND	10	µg/L	1	5/30/2012 8:05:52 PM
Bromobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Bromodichloromethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Bromoform	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Bromomethane	ND	3.0	µg/L	1	5/30/2012 8:05:52 PM
2-Butanone	ND	10	µg/L	1	5/30/2012 8:05:52 PM
Carbon disulfide	ND	10	µg/L	1	5/30/2012 8:05:52 PM
Carbon Tetrachloride	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Chlorobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Chloroethane	ND	2.0	µg/L	1	5/30/2012 8:05:52 PM
Chloroform	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Chloromethane	ND	3.0	µg/L	1	5/30/2012 8:05:52 PM
2-Chlorotoluene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
4-Chlorotoluene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
cis-1,2-DCE	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	5/30/2012 8:05:52 PM
Dibromochloromethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Dibromomethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2-Dichlorobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,3-Dichlorobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,4-Dichlorobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Dichlorodifluoromethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,1-Dichloroethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,1-Dichloroethene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2-Dichloropropane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,3-Dichloropropane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
2,2-Dichloropropane	ND	2.0	µg/L	1	5/30/2012 8:05:52 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Page 11 of 20

Analytical Report Lab Order 1205A69 Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Maverik/Jackson OCD 1205A69-006

Lab ID:

Client Sample ID: Trip Blank

Matrix: TRIP BLANK

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: MMS
1,1-Dichloropropene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Hexachlorobutadiene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
2-Hexanone	ND	10	µg/L	1	5/30/2012 8:05:52 PM
Isopropylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
4-Isopropyltoluene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
4-Methyl-2-pentanone	ND	10	µg/L	1	5/30/2012 8:05:52 PM
Methylene Chloride	ND	3.0	µg/L	1	5/30/2012 8:05:52 PM
n-Butylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
n-Propylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
sec-Butylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Styrene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
tert-Butylbenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	1	5/30/2012 8:05:52 PM
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
trans-1,2-DCE	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,1,1-Trichloroethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,1,2-Trichloroethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Trichloroethene (TCE)	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Trichlorofluoromethane	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
1,2,3-Trichloropropane	ND	2.0	µg/L	1	5/30/2012 8:05:52 PM
Vinyl chloride	ND	1.0	µg/L	1	5/30/2012 8:05:52 PM
Xylenes, Total	ND	1.5	µg/L	1	5/30/2012 8:05:52 PM
Surr: 1,2-Dichloroethane-d4	101	70-130	%REC	1	5/30/2012 8:05:52 PM
Surr: 4-Bromofluorobenzene	110	70-130	%REC	1	5/30/2012 8:05:52 PM
Surr: Dibromofluoromethane	92.2	69.8-130	%REC	1	5/30/2012 8:05:52 PM
Surr: Toluene-d8	107	70-130	%REC	1	5/30/2012 8:05:52 PM

Qualifiers:	*/X	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank		
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit		
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	•	
S Spike Recovery outside accepted recovery limits			Page 12 of	20		

Collection Date: Received Date: 5/25/2012 10:25:00 AM

Client: Project:	Soude Mave	er, Miller and Asso rik/Jackson OCD	ociates						
Sample ID	MB-2135	SampType:	MBLK	Test	Code: EPA Metho	d 8011/504.1: E	DB		
Client ID:	PBW	Batch ID:	2135	R	unNo: 3071				
Prep Date:	5/29/2012	Analysis Date:	5/29/2012	S	eqNo: 84971	Units: µg/L			
Analyte		Result PC	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoet	hane	ND 0.0)10						
Sample ID	LCS-2135	SampType:	LCS	Test	Code: EPA Metho	d 8011/504.1: E	DB		
Client ID:	LCSW	Batch ID:	2135	R	unNo: 3071				
Prep Date:	5/29/2012	Analysis Date:	5/29/2012	S	eqNo: 84972	Units: µg/L			
Analyte		Result PC	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoet	hane	0.093 0.0	0.1000	0	93.0 70	130			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#:	1205A69
	06-Jun-12

Client: Project:	Souder, N Maverik/.	/liller and Jackson O	Associa CD	ates							
Sample ID 5M	IL RB	SampT	SampType: MBLK TestCode: EPA Method 8015B: Gasoline Range								
Client ID: PB	3W	Batch	h ID: R:	3145	F	lunNo: 3	145				
Prep Date:		Analysis D	Date: 5	/31/2012	S	SeqNo: 8	6907	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Or	rganics (GRO)	ND	0.050								
Surr: BFB		16		20.00		79.9	69.3	120			
Sample ID 2.5	5UG GRO LCS	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e	
Client ID: LC	sw	Batch	h ID: R:	3145	F	RunNo: 3	145				
Prep Date:		Analysis D	Date: 5	/31/2012	S	SeqNo: 8	6908	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Or	rganics (GRO)	0.54	0.050	0.5000	0	108	101	123			
Surr: BFB		20		20.00		97.7	69.3	120			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#: 1205A69

06-Jun-1	2
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Client: S	ouder, Miller and	Associa	ates							
Project: N	laverik/Jackson O	CD								
Sample ID 5ml rb	Samp	Гуре: М	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	Batch ID: R3118 RunNo: 3118								
Prep Date:	Analysis [Date: 5	/30/2012	\$	SeqNo: 8	6304	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTB	E) ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1.2-DCF	ND	1.0								
cis-1 3-Dichloropropene	ND	1.0								
1 2-Dibromo-3-chloropropar		2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1 2-Dichlorohenzene	ND	1.0								
1 3-Dichlorobenzene		1.0								
1 /I-Dichlorobenzene		1.0								
		1.0								
1 1-Dichloroethane		1.0								
1 1-Dichloroethene		1.0								
1 2 Dichloropropapo		1.0								
	ט או סוא	1.0								
		1.0								
		2.0								
I, I - Dichloropropene		1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc

WO#: **1205A69**

Client:	Souder, Miller ar	nd Associa	ates							
Project:	Maverik/Jackson	OCD								
Sample ID 5ml rb	Sam	npType: M I	BLK	Tes	stCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Ba	atch ID: R3	3118	F	RunNo: 3	118				
Prep Date:	Analysi	s Date: 5	/30/2012	:	SeqNo: 8	6304	Units: µg/L			
Analyte	Result	t PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND) 10								
Isopropylbenzene	ND) 1.0								
4-Isopropyltoluene	ND) 1.0								
4-Methyl-2-pentanone	ND) 10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND) 1.0								
n-Propylbenzene	ND) 1.0								
sec-Butylbenzene	ND) 1.0								
Styrene	ND) 1.0								
tert-Butylbenzene	ND) 1.0								
1,1,1,2-Tetrachloroethane	ND) 1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND) 1.0								
trans-1.2-DCE	ND) 1.0								
trans-1.3-Dichloropropene	ND) 1.0								
1.2.3-Trichlorobenzene	ND) 1.0								
1 2 4-Trichlorobenzene	ND) 1.0								
1 1 1-Trichloroethane) 10								
1.1.2-Trichloroethane) 10								
Trichloroethene (TCE)) 1.0								
Trichlorofluoromethane) 1.0) 1.0								
1.2.2 Trichloronronano		, 1.0 , 2.0								
Vipul chlorido		2.0								
Villyi chionue) 1.0) 1.5								
Ayleries, Tuldi	NU 10	0 I.O	10.00		100	70	120			
Sun: 1,2-Dichloroethane	-04 10)	10.00		103	70	130			
Surr: 4-Bromoliuoropen.	zene 10)	10.00		103	70	130			
Surr: Dibromoliuorometr	nane 9.2	<u> </u>	10.00		92.0	69.8	130			
Sun: Toluene-a8	10)	10.00		101	70	130			
Sample ID 100ng Ic	s Sam	npType: LC	S	Tes	stCode: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Ba	atch ID: R3	8118	F	RunNo: 3	118				
Prep Date:	Analysi	s Date: 5	/30/2012	:	SeqNo: 8	6307	Units: µg/L			
Analyte	Result	t PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	3 1.0	20.00	0	91.3	84.1	126			
Toluene	20) 1.0	20.00	0	101	80	120			
Chlorobenzene	19	9 1.0	20.00	0	96.0	70	130			
1,1-Dichloroethene	20) 1.0	20.00	0	99.6	83	130			
Trichloroethene (TCE)	20) 1.0	20.00	0	101	76.2	119			
Surr: 1,2-Dichloroethane	e-d4 10)	10.00		102	70	130			
Surr: 4-Bromofluoroben:	zene 11		10.00		110	70	130			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#:	1205	A69

06-Jun-12

Client: Soude Project: Maver	r, Miller and rik/Jackson O	Associa CD	ates							
Sample ID 100ng lcs	SampT	ype: LC	s	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	h ID: R3	8118	F	RunNo: 3	118				
Prep Date:	Analysis D	Date: 5/	/30/2012	S	SeqNo: 8	6307	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.0		10.00		89.8	69.8	130			
Surr: Toluene-d8	11		10.00		105	70	130			
Sample ID b5	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	h ID: R3	8118	F	RunNo: 3	118				
Prep Date:	Analysis D	Date: 5/	/30/2012	Ś	SeqNo: 8	6342	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#:	1205A69	
	AC T 10	

06-J	un-12
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Client: Se Project: M	ouder, Miller and Iaverik/Jackson O	Associa CD	ites							
Sample ID b5	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batcl	h ID: R3	118	F	RunNo: 3	118				
Prep Date:	Analysis D	Date: 5/	30/2012	S	SeqNo: 8	6342	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1.2.3-Trichlorobenzene	ND	1.0								
1.2.4-Trichlorobenzene	ND	1.0								
1.1.1-Trichloroethane	ND	1.0								
1.1.2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1.2.3-Trichloropropane	ND	2.0								
Vinvl chloride	ND	1.0								
Xvlenes, Total	ND	1.5								
Surr: 1.2-Dichloroethane-	d4 11		10.00		108	70	130			
Surr: 4-Bromofluorobenze	ene 11		10.00		114	70	130			
Surr: Dibromofluoromethe	ane 9.4		10.00		94.5	69.8	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

R

- Analyte detected in the associated Method Blank В
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Client:	Souder, Miller and Associates
Project:	Maverik/Iackson OCD

Maven	IK/Jackson Ov	CD								
Sample ID 100ng lcs2	SampT	ype: LC	S	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	ID: R3	118	R	RunNo: 3	118				
Prep Date: Analysis Date: 5/31/2012 SeqNo: 863		6343	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.6	84.1	126			
Foluene	21	1.0	20.00	0	103	80	120			
Chlorobenzene	20	1.0	20.00	0	100	70	130			
I,1-Dichloroethene	21	1.0	20.00	0	105	83	130			
Frichloroethene (TCE)	21	1.0	20.00	0	105	76.2	119			
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.9	69.8	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Qualifiers: */X Value exceeds Maximum Contaminant Level.

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- - RPD outside accepted recovery limits

WO#: 1205A69 06-Jun-12

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WO#:	1205A69
	06-Jun-12

Client: Project:	Soud Mave	er, Miller and Ass erik/Jackson OCD	ociates						
Sample ID	MB-2152	SampType	MBLK	Tes	tCode: EPA 60	10B: Total Reco	overable Met	als	
Client ID:	PBW	Batch ID:	2152	F	RunNo: 3170				
Prep Date:	5/30/2012	Analysis Date:	6/1/2012	S	SeqNo: 87551	Units: m	g/L		
Analyte		Result P	QL SPK va	ue SPK Ref Val	%REC Low	/Limit HighLim	it %RPD	RPDLimit	Qual
Lead		ND 0.0	050						
Sample ID	LCS-2152	SampType	LCS	Tes	tCode: EPA 60	10B: Total Reco	overable Met	als	
Client ID:	LCSW	Batch ID:	2152	F	RunNo: 3170				
Prep Date:	5/30/2012	Analysis Date:	6/1/2012	S	SeqNo: 87552	Units: m	g/L		
Analyte		Result P	QL SPK val	ue SPK Ref Val	%REC Low	/Limit HighLim	it %RPD	RPDLimit	Qual
Lead		0.49 0.0	050 0.50	00 0	97.0	80 12	0		

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Page 20 of 20

	HALL
_	ANALYSIS
	LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.con

Sample Log-In Check List

Clie	nt Name:	SMA-FARM	, , w	ork Or	der I	Numl	ber:	1205A69
Rec	eived by/date	e:AT	05/25/12	.				ı
Log	ged By:	Lindsay Mangin	5/25/2012 10:25:00 AM				Ø	and y Albanja
Cor	npleted By:	Lindsay Mangin	5/25/2012 12:26:44 PM					- willion
Rev	iewed By:		/,				0	
Che		IT UYLSI	/2					
	Ween seels	intent2		Vee		Ma]	Not Proport
1. ว	le Chain of (Intact r Custody complete?		Tes		No		
2. 3	How was the	e sample delivered?		Clier	uz ht	110		
Э.				0.001				
Log	<u>In</u>							
4.	Coolers are	present? (see 19. for coo	ler specific information)	Yes	✓	No		
_	14/00 00 0#0			Vee		No		
э.	vvas an alle	mpt made to cool the san	npies?	tes	V	NO		
6.	Were all sar	mples received at a tempe	erature of >0° C to 6.0°C	Yes	✓	No		
7.	Sample(s) in	n proper container(s)?		Yes	✓	No		
8.	Sufficient sa	ample volume for indicated	d test(s)?	Yes	\checkmark	No		
9.	Are samples	s (except VOA and ONG)	properly preserved?	Yes	✓	No		
10.	Was preserv	vative added to bottles?		Yes		No		
44		avo zoro boodeneoo?	1	ndde		No		HN0318 -0014 -0040 -0050
11.	Were any sa	ave zero neauspace?	hroken?	Yes		No		No von viais ucceptable pt
12.	Does paperv	work match bottle labels?		Yes	✓	No		# of preserved
10.	(Note discre	pancies on chain of custo	ody)					for pH: 5
14.	Are matrices	s correctly identified on Cl	hain of Custody?	Yes	✓	No		(<2 or >12 unless noted)
15.	ls it clear wh	nat analyses were request	ted?	Yes		No		Adjusted? VLS
16.	Were all hold	ding times able to be met	?	Yes	✓	No		
6-	oiol Hondi		u. <i>j</i>					
<u>spe</u>	Maa cligat -		o with this order?	V		N-		
17.	vvas client n		s with this order?	res		NO		
	Person	Notified:	Date:					
	By Who	om:	Via:] eMa	.il [] Pł	hone	e 🔄 Fax 🛄 In Person
	Regard	ling:	······					
	Client I	Instructions:						

18. Additional remarks:

19. Cooler Information

Cooler No.	Temp ⁰C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Re	ecord	Turn-Around	Time:						لا بر			2	2			
Client: SMA	, ¹ ,	بر Standard	□ Rush_						u X L L		25					
		Project Name						MM	allen	ironm	ental.	EOS) 		-
Mailing Address: AN LEAN	Blud	Maverik	/Dackso	n CD		4901	Hawkii	IS NE	- Alt	nquei	rque,	NM 8	1109			
Faminahn MM ST	-TW	Project #:				Tel. 5	05-34	5-397	5	ax 5	05-34	5-41	22			
Phone #: (5,5) 23 54 7		019	Sleght						Anal	/sis F	sedue	st				
email or Fax#:		Project Mana	Jer:		((ləs (ləs				([*] C						
QA/QC Package;	ill Validation)	Rei	BANCON		r208) s	io se (Gas oi				PO ₄ ,S(PCB's			<u></u>		
Accreditation		Sampler: S	C/9D	No	- TMB'	15B (G	(1.8)	(1.40	(UM	^{'Z} ON ^{'E}	7808 /	(\	9) F			ıר N)
🗆 EDD (Type)		Sample Temp	erature:		- 38	4 80 - 78	.† P	g po	or r tals	DN'I	səbi	ON [.]	295/			о Y)
Date Time Matrix Sample R	kequest ID	Container Type and #	Preservative Type	HEALINO.	BTEX + MT		TPH (Metho	EDB (Metho	RCRA 8 Me	O, I) snoinA	2012 Pestic	-im92) 0728	2- 7109			səlddu8 riA
5/28/18 1357 Had 26		Le theme	HENSHMAN	1001		\geq		~			<u>~</u>	~	×			<u> </u>
5/2/1 1541 Nac >3				0°02		Х		· 🖌			X		\geq	···		
5/24/12 0958 1+20 JY		6 40mc 1 140PE	H Sela/14/13	- 003		,×	,	X					۲			
5/24/12/10:44 1420 J 8		11	- v	1-00-1		\times		X			×.		\mathbf{x}			
Slay/rall: 34 420 57 2		jı	11	~05		\prec		X				ᡔ	\times			
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$S/\lambda y/\rho_{1}$ is $2 < red by here we have \beta_{2}.$	Å	A how by:	407 1		Кета	rks:										
Date: Time: Relinquished by:		Received by:	NUMAN	Date, Time												
5/ 11 1748 MANTUR		1/1/	2 L	5/2/12/12							,					
If necessary samples submitted to Hall Environm	mental may be subco	ntracted to other acc	vertited laboratories	This serves as notice of this	noesihilit	v Anvs		ted d	ta will he	-dearty	notated	ett uc	anahdice	I rount		

y, samping



September 24, 2012

#5121620

Mr. Jim Griswold Senior Hydrologist EMNRD/Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505 (505) 476-3465 *jim.griswold*@state.nm.us

RE: WORKPLAN FOR SUBSEQUENT INVESTIGATION OF ROLAND JACKSON WATER WELL ISSUE, NEAR KIRTLAND, NEW MEXICO

Dear Mr. Griswold:

Enclosed please find the workplan for subsequent investigation of the Maverik Refinery/Roland Jackson Water Well Issue. The site is located approximately 1.5 miles east of the Kirtland, NM Post Office in Section 17-Township 29 North-Range 14 West, San Juan County, New Mexico, Mr. Jackson's address is #20 CR 6271. This workplan is submitted at the request of the New Mexico Oil Conservation Division (NMOCD) and is in accordance with the State of New Mexico General Services Department Purchasing Division Price agreement #: 10-805-00-07208. The intent of this workplan is to observe the recharge behavior of the Jackson water supply well after it has been pumped down with a hydro-vac truck. Such observation will be followed by a sampling event for the five monitoring wells installed in May, 2012. The Jackson well will be sampled at the same time as the monitoring wells. Souder, Miller & Associates (SMA) appreciates this opportunity to provide environmental consulting services.

Acceptance

Please indicate your acceptance of this workplan by endorsing a copy of this letter and returning it to us or by the issuance of a Purchase Order. You may retain the original for your records. This workplan may be withdrawn, at the option of SMA, if it has not been accepted within 30 days of its date of issue. If you have any questions or comments concerning this workplan, please feel free to call me at (505) 325-7535 or contact me via e-mail at cindy.gray@soudermiller.com.

Sincerely, MILLER ENGINEERS, INC. D/B/A SOUDER, MILLER & ASSOCIATES

ACCEPTED: By:	
Title:	
Date:	

Cynthia A. Gray, C.H.M.M. Senior Scientist, Environmental Manager

Reid S. Allan, Vice President

WORK PLAN & BUDGET CONTINUED SITE INVESTIGATION

NEW MEXICO OIL CONSERVATION DIVISION

MAVERIK REFINERY/ROLAND JACKSON WATER WELL ISSUE

KIRTLAND, NEW MEXICO

SEPTEMBER 24, 2012

This work plan and budget have been prepared by Souder, Miller & Associates (SMA) pursuant to the request from the New Mexico Oil Conservation Division (NMOCD) and is in accordance with the State of New Mexico General Services Department Purchasing Division Price Agreement #10-805-00-07208. The proposed scope of work shall include utilization of a vacuum truck for total fluids and sludge removal from the Roland Jackson water supply well. The goal is to determine if the Jackson water supply well will re-charge with significant non-aqueous petroleum liquids (*NAPL*), ground water, or both. The Roland Jackson well is located at #20 CR 6271, San Juan County, New Mexico. The Jackson Property site is in the SW/4, SE/4 Section 17, Township 29 North, Range 14 West.

On June 12, 2012, the Jacksons' former water supply well was gauged with a Geotech Interface Probe. Fluid level was detected at 5.48 feet below top of casing and water was detected at 6.12 feet below top of casing. A total of 0.64 feet of NAPL was present in the well. The well was gauged to have a total depth of 9.9 feet below top of casing. Mr. Jackson believes the supply well has accumulated a number of feet of sediment. Additionally, a disposable bailer has been dropped in the well during an earlier NMOCD staff investigation of the Jackson well. The bailer remains in the well. In order to assess the presence of hydrocarbon impacting the Roland Jackson irrigation water supply well, SMA proposes total fluids removal, followed by monitoring of well recovery, and sampling of the water supply well as well as the surrounding five monitoring wells.

ACCESS PERMISSION, WORK NOTIFICATION, HEALTH & SAFETY: In preparation for field activities and sampling, written access permission will be obtained from property owner through Brandon Powell of NMOCD-Aztec. A site specific health and safety plan (HASP) will be developed in accordance with OSHA regulations and the SMA Corporate Health & Safety Program. All site personnel will be briefed on the HASP prior to initiating field activities.

PROPOSED FIELD ACTIVITIES: SMA proposes using a Super Sucker vacuum truck to remove the hydrocarbons, sludge and water from the supply well. First, the well will be gauged for NAPL. SMA will attempt to recover the bailer. The well will then be evacuated, using the vacuum truck. After approximately two hours of recovery time, the well will be gauged for the presence of NAPL and water level once again. If a substantial amount of NAPL is present, the well will be evacuated once again and repeated as necessary to remove total NAPL and/or water as time permits for one day. The well will then be closed and sealed with tamper evident custody tape for three days. After three days, SMA will gauge the well for the presence of phase separated hydrocarbon fluid. If NAPL is not present, the supply well and the other five groundwater monitoring wells will be sampled with samples sent to Hall Environmental Analytical Laboratories (HEAL) using standard Chain of Custody protocol.

Groundwater Analytical Methods: The groundwater samples will be analyzed using the following methods:

- EPA Method 8011/504.1 for EDB
- EPA Method 8015B for Gasoline Range Organic Compounds (GRO)
- EPA Method 8260B for Volatiles Organic Compounds (VOC)
- EPA Method 6010 for Total Lead (Pb)

The removed water, NAPL and sludge will be transported and disposed at an OCD approved disposal facility. The closest facility is Industrial Ecosystems Incorporated near Farmington, NM. SMA will oversee all field activities and conduct all sampling. SMA will confer with NMOCD for authorization prior to performing additional work or incurring any additional costs related to the well assessment, if needed.

	Cost Summary - Continue Maverik Refinery/Roland Kirtland, New	ed Site Invest I Jackson Pro Mexico	igation operty						
Task	Description	Anticipated Number of Units	Cost/Unit incl.7.125% NMGRT	Task Subtotal					
1	Site Access, Notification, Coordination, Health and Safety Plan, Administrative Costs, Work Plan Preparation,	1	\$1,958.25	\$1,958.25					
2	Subcontractor and Fluid Disposal Costs, SMA Fluid Extraction Supervision, Water Supply Well and Groundwater Sampling, Water Quality Instruments and Sampling Equipment, Field Expenses, Laboratory Analytical Costs	1	\$8,789.61	\$8,789.61					
3	Letter Report	1	\$2,950.22	\$2,950.22					
4	Performance Bond Acquisition, Bon of \$13,7	d Premium on I 00	Estimated total	\$1,450.00					
	TOTAL CONTINUED SIT	E INVESTIGAT	ION	\$15,148.07					

PERFORMANCE BOND

In compliance with the requirements of the State of New Mexico General Services Department Purchasing Division Price Agreement #10-805-00-07208, prior to beginning work, SMA will obtain a performance bond for the completion of the above-outlined scope of work. Costs for the bond will be billed at cost.

Site Access, Administrative Preparation

Title	Job Description	Days	Hours/Day	Total Hours	@	Subtotal
Principal	Contractual Oversight TOTAL>>	1	1	1 1	\$140.00	\$140.00
Senior	Regulatory oversight, HASP workplan review Report review and revisions, meetings TOTAL>>	1 1	6 2	6 2 8	\$110.00 \$110.00	\$660.00 \$220.00
Project	Regulatory review, data review and workplan construction, access Report construction, revisions TOTAL>>	1 0	0 0	0 0 0	\$87.00 \$87.00	\$0.00 \$0.00
Staff	Health and Safety Field Survey (incl. mobe) TOTAL>>	1 1	8 0	8 0	\$65.00 \$65.00 \$65.00	\$520.00 \$0.00
DT II	drafting site maps Draft site & contaminant maps TOTAL>>	1 0	0 0	0 0 0	\$60.00 \$60.00	\$0.00 \$0.00
Admin	Budget creation, tracking and invoicing TOTAL>>	1	2	2 2	\$55.00	\$110.00
Sec	Budget creation, tracking, invoicing and reports TOTAL>>	1	2	2 2	\$44.00	\$88.00
Expenses	Phone, Copies & Mail misc. reproduction	1 1	4 2	4 2	\$15.00 \$15.00	\$60.00 \$30.00
SUBTOTA NMGRT (@ TOTAL>>	L>> @ 7.125%)>>					\$1,828.00 \$130.25 \$1,958.25

Extraction_sampling

Total Fluid Extra Title	action from and sampling of water supply well and sampli Job Description	ng of four 17- Days/Units	foot soil bo hrs/unit	rings and letter Total Hours	report @	Subtotal		
Principal					.	··· ···		
	contract oversight	1	0.5	0.5	\$ 140.	00 \$70.00		
	TOTAL>>			0.5				
Senior	Scoping and client/regulator liaison	2	2	4	\$ 110.	00 \$440.00		
	TOTAL>>			4				
Project	Scoping and project management, access coordination	2	5	10	\$87.	00 \$870.00		
	TOTAL>>			10				
Staff Sci	Subcontractor interaction	2	1	2	\$ 65.	00 \$130.00		
	TOTAL>>			2				
Admin								
	Budget creation, tracking and invoicing TOTAL>>			0 0	\$ 58.	00 \$0.00		
Sec	Budget creation, tracking, invoicing and reports TOTAL>>			0 0	\$ 44.	00 \$0.00		
SUBTOTAL>> NMGRT (@ 7.1 TOTAL>>	25%)>>					\$1,510.00 \$107.59 \$1,617.59		
SMA - Expense	2S							
	Mileage Truck Water Quality equipment PID Expendable equipment	2 2 1 1 2	15 1 1 1 1	30 2 1 1 2	\$ 0. \$ 75. \$ 25. \$ 65. \$ 40.	75 \$22.50 00 \$150.00 00 \$25.00 00 \$65.00 00 \$80.00		
SUBTOTAL>> NMGRT (@ 7.1	125%)>>	2	1	2	\$ 35.	\$70.00 \$412.50 \$29.39	¢000 70	
TUTAL>>						\$441.89	\$883.78	
SMA - Field Act	tivities Total Fluid Extraction Mapping, Travel time and mob/demob Sampling - Staff Sci Sampling - Senior sci TOTAL>>	1 2 1.5 1.5	10 1 6 6	10.0 2 9 9 30.0	\$65. \$65. \$65. \$110.	00 \$650.00 00 \$130.00 00 \$585.00 00 \$990.00		
SUBTOTAL>> NMGRT (@ 7.1 TOTAL>>	25%)>>					\$2,355.00 \$167.79 \$2,522.79		
Subcontractors	- Vac Truck and Disposal Super Sucker Vacuum Truck Disposal (per bbl)	1 1	8 10	8 10	\$ 205. \$ 16.	00 \$1,640.00 50 \$165.00		
SUBTOTAL>> NMGRT (@ 7.1 TOTAL>>	25%)>>					\$1,805.00 \$128.61 \$1,933.61		
Lab Water								per bbl \$193.36
	WATER 8011/504.1 WATER 8015B GRO WATER 8260B VOA WATER 6010 Pb	6 6 6 6	1 1 1 1	6 6 6	\$ 45. \$ 45. \$ 85. \$ 110.	00 \$270.00 00 \$270.00 00 \$510.00 00 \$660.00		
SUBTOTAL>> NMGRT (@ 7.1 TOTAL>>	25%)>>					\$1,710.00 \$121.84 \$1,831.84		
TOTAL>>						\$8,789.61		per sample \$305.31

Preliminary Investigation Report

Title	Job Description	Days	Hours/Day	Total Hours	@	Subtotal
Principal	Report review TOTAL>>	1	0.5	0.5 0.5	\$140.00	\$70.00
Senior	Regulatory oversight and report review TOTAL>>	1	3	3 3	\$110.00	\$330.00
Project	Report TOTAL>>	2	4	8 8	\$87.00	\$696.00
Staff	Report, tables and drawings TOTAL>>	2	8	16 16	\$65.00	\$1,040.00
וו וט	Draft site & contaminant maps TOTAL>>	1	6	6 6	\$60.00	\$360.00
Admin	Budget creation, tracking and invoicing TOTAL>>			2 2	\$55.00	\$110.00
Sec	Budget creation, tracking, invoicing and reports TOTAL>>			2 2	\$44.00	\$88.00
Expenses,	fixed Phone, Copies & Mail misc. reproduction			2 2	\$15.00 \$15.00	\$30.00 \$30.00
SUBTOTA NMGRT (0 TOTAL>>	NL>> @ 7.125%)>>					\$2,754.00 \$196.22 \$2,950.22

Task 3 Bond Acquisition Fee Schedule: NM Price Agreement

Description		Qty	Each	n Sub		Price/Unit	Price	
Principal	Oversight Review and execute TOTAL		1 1	1 1	1 1 2	\$140.00 \$140.00		\$140.00 \$140.00
Senior I								
	Coordination for bond TOTAL		2	2	4 4	\$110.00		\$440.00
Admin	Coordination for bond, interface with bonding agent TOTAL				4 4	\$58.00		\$232.00
Admin	Bond Premium - estimated TOTAL		1	3.00%		\$13,698.07		\$410.94
SUBTOTAL >> Tax (7.125%) >> TOTAL ROUNDUP TOTA	AL						97 97 97	\$1,362.94 \$97.11 \$1,460.05 \$1,450.00

Bond

	Cost Summary - Continued Site Investigation						
Maverik Refinery/Roland Jackson Property Kirtland, New Mexico							
Task	Description	Anticipated Number of Units	Cost/Unit incl.7.125% NMGRT	Та	isk Subtotal		
1	Site Access, Notification, Coordination, Health and Safety Plan, Administrative Costs, Work Plan Preparation	1	\$1,958.25	\$	1,958.25		
2	Subcontractor and Fluid Disposal Costs, SMA Fluid Extraction Supervision, Water Supply Well and Groundwater Sampling, Water Quality Instruments and Sampling Equipment, Field Expenses, Laboratory Analytical	1	\$8,789.61	\$	8,789.61		
3	Letter Report	1	\$2,950.22	\$	2,950.22		
4	Bond Acquisition, Bond Premium on Estimated Total of \$13,700			\$	1,450.00		
	TOTAL CONTINUED SITE INVES	TIGATION		\$	15,148.07		

STATE STATES	a vite	State of New Mexico Purchase Order				PO Number to be or	n all Invoices and Co Dispatch via	oices and Correspondence		
Second and a second and a second and a second a			Purchase (52100-000)		der 39434	Date 03/14/2013	Revision	Page		
Energ 1220 Sout Santa Fe I United Sta	th St. Francis Drive NM 87505 ates Vendor: 00 SOUDER MILI 1201 PARKW/ SANTA FE NM	US & Resourd 000048816 LER & ASSOCIATES AY DR SUITE C 1 87507	es	Payment Ter Pay Now Buyer RACHEL D. Ship To: Bill To:	ms Frei FOB HERRERA 1220 Sout Room 346 Santa Fe United Sta 1220 Sout Room 346 Santa Fe United Sta	ight Terms Destination Phone 505/476-3:	311	Ship Via Best Way		
Line-Sch	Item/Description	<i>ו #.</i> ו	Mfg ID	Qua	antity UOM	PO Price	Extended Amt	Due Date		
1- 1	RECR-27 Jackso removal from sup water and produc reporting.	on Water Well - Fluids oply well. Gauge tt recovery and			1.00EA	17,420.00	17,420.00	03/14/2013		
	52100-31100-0	0710000000-535300-	-0750113	3-20000 Sche	edule Total	-	17,420.00			
	Contract ID:	10-805-00-07208AG	C	Contract Line:	0	Release: 0				
				Item	Total	_	17,420.00			
Price Agre Expires or	eement 10-805-00 n August 15, 2013	-07208								

Total PO Amount 17,420.00

Authorizou orginaturo	
- Q ILP	
John H De	ma

STATE OF NEW MEXICO GENERAL SERVICES DEPARTMENT- PURCHASING DIVISION TERMS AND CONDITIONS UNLESS OTHERWISE SPECIFIED

- 1. GENERAL: When the State Purchasing Agent issues a purchase document in response to the Vendors bid, a binding contract is created.
- VARIATION IN QUANTITY: No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowances in manufacturing process, and then only to the extent, if any, specified elsewhere in this order.
 ASSIGNMENT:
 - A: Neither the order, nor any interest therein, nor claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in subparagraph 3B below or as expressly authorized in writing by the STATE PURCHASASING AGENTS OFFICE. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
 - B: Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the State as to goods, services, and materials purchased in connection with this bid are hereby assigned to the State.
- 4. STATE FURNISHED PROPERTY: State furnished property shall be returned to the state upon request in the same condition as received except for ordinary wear, tear, and modifications ordered hereunder.
- DISCOUNTS: Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within 20 days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise or invoice, whichever is later.
- 6. INSPECTION: Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for non-conformance with specifications shall be removed, at the Vendors risk and expense, promptly after notice of rejection.
- 7. INSPECTION OF PLANT: The State Purchasing Agent may inspect, at any reasonable time, the part of the contractors, or any subcontractors plant or place of business, which is related to the performance of this contract.
- 8. COMMERCIAL WARARANTY: The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives to any customer for such supplies or services, and that the rights and remedies provided herein shall extend to the State and are in addition to and do not limit any rights afforded to the State by any other cause of this order. Vendor agrees not to disclaim warranties of fitness for a particular purpose or merchantability.
- 9. TAXES: The unit price shall exclude all State taxes.
- 10. PACKING, SHIPPING AND INVOICING:
 - A: The States purchase document number and the Vendors name, users name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipment. The users count will be accepted by the Vendor as final and conclusive on all shipments not accompanied by a packing ticket.
 - B: The Vendors invoice shall be submitted in triplicate, duly certified and shall contain the following information: order number, description of supplies or services, quantities, unit prices and extended totals. Separate invoices shall be rendered for each and every complete shipment.
- C: Invoices must be submitted to the using agency and NOT THE STATE PURCHASING AGENT.
- 11. DEFAULT: The State reserves the right to cancel all or any part of this order without cost to the State, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, to hold the Vendor liable for any excess cost occasioned by the State due to the Vendors default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of the Vendor, such causes include, but are not restricted to, acts of God or of the public enemy, acts of the State or of the Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargos, unusually severe weather and defaults of subcontractors due to any of the above, unless the State shall determine that the supplies or services to be furnished by the subcontractor where obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights and remedies of the State provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.
- 12. NON-COLLUSION: In signing this bid, the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this proposal submitted to the State Purchasing Agent.
- 13. NON-DISCRIMINATION: Vendors doing business with the State of New Mexico must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of that Act, Rev., 1979.
- 14. THE PROCUREMENT CODE: Sections 13-1-28 through 13-1-199 NMSA 1978 imposes civil and criminal penalties for its violation.
- In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.
- 15. All bid items are to be NEW and most current production, unless otherwise specified.
- 16. PAYMENT FOR PURCHASES: Except as otherwise agreed to: late payment charges may be assessed against the user state agency in the amount and under the conditions set forth in section 13-14158 NMSA 1978.
- 17. WORKERS COMPENSATION: The Contractor agrees to comply with state laws and rules pertaining to workers compensation benefits for its employees. If the Contractor fails to comply with Workers Compensation Act and applicable rules when required to do so, this (Agreement) may be terminated by the contracting agency.
- 18. PAY EQUITY RECORDING: The Contractor agrees to comply with New Mexico Pay Equity reporting requirements as detailed in Executive Order 2009-049 Implementation Guidance available at http://www.generalservices.state.nm.us/spd/guidance.pdf

Oil and Gas Reclamation Fund Oil Conservation Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Santa Fe, New Mexico 87505

CONSENT TO ENTRY FOR INVESTIGATION, RECLAMATION, & MONITORING <u>Groundwater Investigation</u> PROJECT <u>San Juan County</u> COUNTY (IES) G,17,29W-14N UNIT LETTER, SECTION, TOWNSHIP, RANGE

Pursuant to Chapter 70, Article 2, Section 38 of the Oil and Gas Act, the Director of the Oil Conservation Division (OCD) proposes to utilize the Oil and Gas Reclamation Fund in order to restore and remediate abandoned well sites and associated production facilities to protect public health and the environment.

To achieve this objective, it will be necessary for OCD, its employees, agents, and contractors to enter upon the property described below:

Residential Properties located at #18 and #20 CR 6271, Kirtland, New Mexico

 A(n) ______ court ordered ______, interest in such property is held by _______

 Gloria S. Chavez _______ (name of interest holder). Such interest was acquired by _______ (deed, patent, etc.) as recorded in Book _______

 page(s) _______, in ______ County ______ County ______ County ______ records.

NOW, THEREFORE, in consideration of the benefits that will accrue to the Interest Holder and to the general public, the Interest Holder does hereby grant to the OCD, its employees, agents, contractors, and subcontractors a right of entry into, over, and upon the property described above, including all necessary and convenient rights of ingress, egress, and regress, with all materials and equipment necessary to conduct the proposed investigation and reclamation activities and to do any and all things necessary and convenient to effectively carry on said activities in a good and workmanlike manner, including but not limited to the temporary storage of equipment and materials, the right to remove or dispose of materials necessary to reclamation, and the construction of temporary roadways on the property. Said right of entry is granted to complete the reclamation activities and to conduct inspections of, and perform maintenance and repairs to, the reclamation activities completed on the property.

The Interest Holder understands and acknowledges that the success of the project cannot be warranted and the proposed work may not accomplish the intended result. The Interest Holder also acknowledges

04/2012

that the OCD has no responsibility or liability for any oil and gas related damage to the property that occurred prior to or that might occur during or after the reclamation work.

It is understood the work performed in the project area shall be done by contractors for the OCD and the OCD is without authority to assume the risk of injury to persons or damage to persons or property resulting from the action of the contractors, however the OCD shall require contractors performing the work on the property to obtain and keep in force liability insurance in the minimum amount of \$1,000,000 per occurrence and \$2,000,000 per aggregrate.

Execution of this Consent to Entry does not obligate OCD to perform any part of the contemplated or proposed reclamation work.

Interest Holder agrees that any sale, assignment, mortgage, or other encumbrance or conveyance of this property shall be made subject to this Consent to Entry. Additionally, Interest Holder agrees to provide written notice to the OCD ten (10) days in advance of any such event.

Witness my hand or seal this May 13, 2013 day of 13th 2013.
ACKNOWLEDGEMENT
STATE OF <u>New Mexico</u>) COUNTY OF <u>Sen Juan</u>) The foregoing Consent to Entry was acknowledged before me this <u>13th</u> day of <u>May</u> , 20 <u>13</u> , by <u>Shery A. Clark</u> .
My commission expires: (Seal) My commission expires: (Seal) OFFICIAL GEAL SHERYLA CLARK MOTARY PUBLIC
ACKNOWLEDGEMENT FOR CORPORATION STATE OF NEW MEDICO STATE OF) My Constrained on Explored 3 - 2 9 - 2 0 + 4 COUNTY OF) Output
The foregoing Consent to Entry was acknowledged before me this day of, 20,
by (name of Interest Holder) the (title)
of (name of Corporation) a (state) corporation. My commission expires:
04/2012