FORM 4
Rev 12/05

State of Colorado
Oil and Gas Conservation Commission

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

RECEIVED
APR 07 2011
COGCC

SUNDRY NOTICE

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

1. OGCC Operator Number: 10322
2. Name of Operator: East Cheyenne Gas Storage LLC
3. Address: 10901 West Toller Drive, Suite 200
City: Littleton State: CO Zip: 80127
4. Contact Name: Megan Tallent (Merchant Energy Partner
Phone: 720-351-4000
Fax: 720-351-4200

Complete the Attachment Checklist — OP OGCC

5. API Number 05-
6. Well/Facility Name: Gillham
7. Well/Facility Number 116251
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENW Sec 6 T11N R52W
9. County: Logen (075)
10. Field Name: Gillham
11. Federal, Indian or State Lease Number: N/A
OGCC Facility ID Number

Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page		
Other		

General Notice

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

	FNL/FSL		FEL/FWL	
Change of **Surface** Footage **from** Exterior Section Lines:				
Change of **Surface** Footage **to** Exterior Section Lines:				
Change of **Bottomhole** Footage **from** Exterior Section Lines:				
Change of **Bottomhole** Footage **to** Exterior Section Lines:				attach directional survey

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer
Latitude
Longitude
Ground Elevation
Distance to nearest property line
Distance to nearest lease line
Distance to nearest well same formation
Distance to nearest bldg, public rd, utility or RR
Is location in a High Density Area (rule 603b)? Yes/No
Surface owner consultation date:

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

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond
Signed surface use agreement attached

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

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

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

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

☐ SPUD DATE:

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

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

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

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

Technical Engineering/Environmental Notice

☐ Notice of Intent
Approximate Start Date:

☐ Report of Work Done
Date Work Completed:

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

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

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

Signed: Date: Email:
Print Name: Megan Tallent Title:

COGCC Approved: Title: Date:
CONDITIONS OF APPROVAL, IF ANY:

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FORM 4 Rev 12/05

TECHNICAL INFORMATION PAGE

FOR OGCC USE ONLY
RECEIVED
APR 0 7 2011
COGCC

1. OGCC Operator Number: 10322 API Number: _____
2. Name of Operator: East Cheyenne Gas Storage, LLC OGCC Facility ID # _____
3. Well/Facility Name: Gillham Well/Facility Number: _____
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENW Sec6 T11N R52W

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

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

See Attachment 1 for Remediation Work Plan

East Cheyenne Gas Storage, LLC

10901 West Toller Drive, Suite 200
Littleton, Colorado 80127
O: 720-351-4000 F: 720-351-4200

March 31, 2011

John Axelson, P.G.
State of Colorado Oil & Gas Conservation Commission
1120 Lincoln St., Suite 801
Denver, CO 80203 Project No. 0104362

Subject: Variance for Remedial Alternative; Gillham Pit ID No. 116251
SWNE Sec 6, T-11-N, R-52-W; Logan County, Colorado

Dear Mr. Axelson:

As you are aware, East Cheyenne Gas Storage, LLC (ECGS) is performing remedial activities at the Schwake A-2 Tank Battery site and the Gillham Pit site pursuant to Notices of Alleged Violations from Colorado Oil & Gas Conservation Commission (COGCC). The remedial work is well underway at the Schwake site and excess capacity exits in the newly constructed Landfarm for that site. The purpose of this submittal is to request a variance to utilize the remaining capacity for remediation of the Gillham site soils.

The basis of the variance request is that the landfarm is located within ½ mile of the Gillham site and this close proximity represents an opportunity to consolidate the materials into a single, segregated landfarm for the short treatment period. The landfarm will be sectioned in such a way as to keep the soils from the two sites separate. Attached to this transmittal are Form 4 and the associated Remediation Work Plan. These documents outline the approach for remediation of the Gillham pits and the efforts that will be made to do so in a safe and protective way. We anticipate that treatment will be complete within approximately two years, and the treated soils will be returned to their respective origins.

We appreciate your review of this variance request. Please call me if you have any questions or comments at 720-351-4000, extension 4006 or on my cell phone at 303-204-0446.

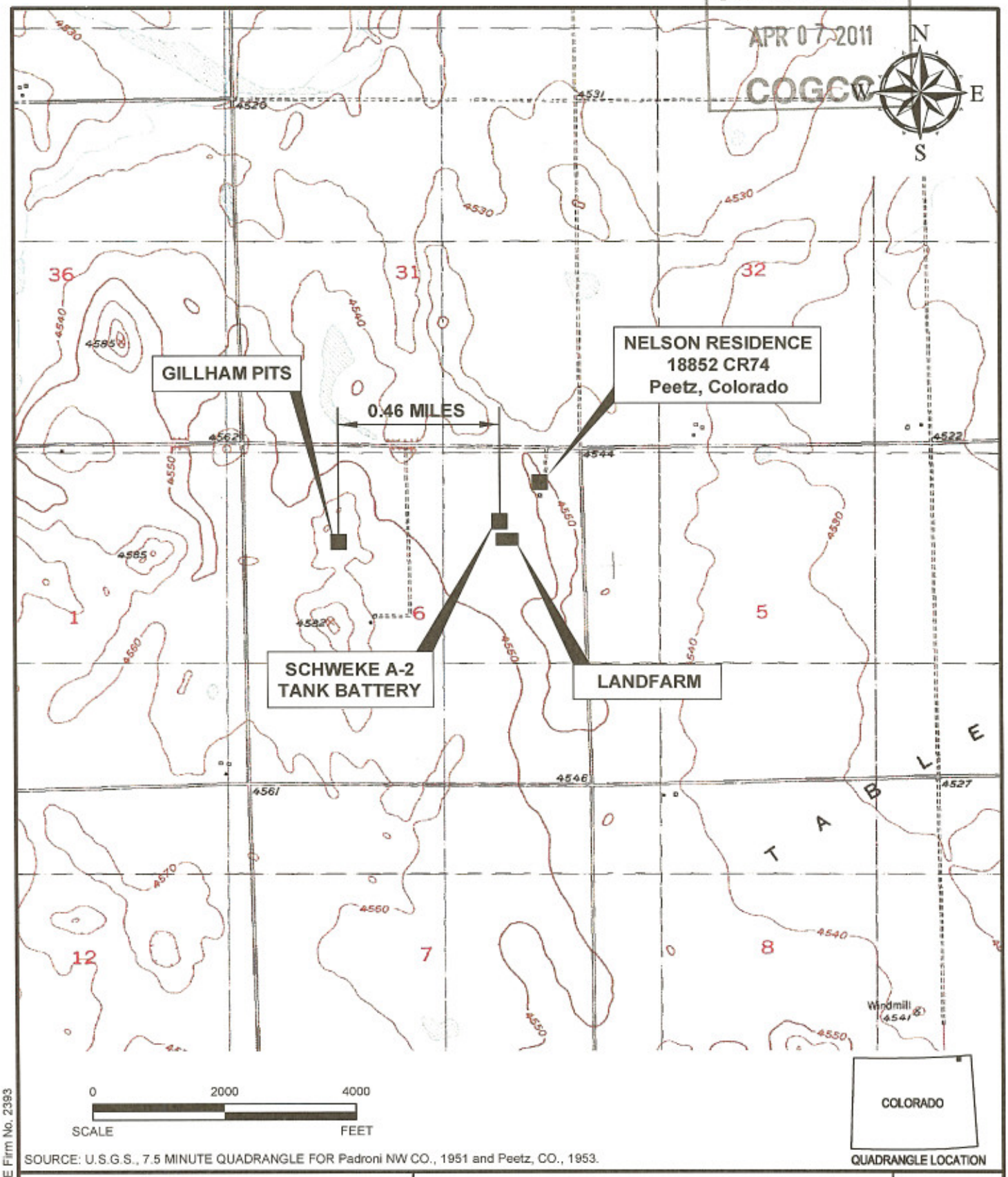
Sincerely,

East Cheyenne Gas Storage, LLC

Megan Tallent

Attachments: Work Plan

cc: Thomas Gottsegen, Chevron Global Upstream
Jim Weber, Coral Production Company
Paul Stefan, Environmental Resources Management Southwest, Inc.



SOURCE: U.S.G.S., 7.5 MINUTE QUADRANGLE FOR Padroni NW CO., 1951 and Peetz, CO., 1953.

Environmental Resources Management

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DATE: 3/8/2011	SCALE: AS SHOWN	REV.:
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FIGURE 5
LOCATION OF GILLHAM PIT AND
SCHWEKE A-2 TANK BATTERY LOCATION
SITE LOCATION MAP
FACILITY ID 116251
Peetz County, CO

ERM

ERM-Southwest, Inc. TX PE Firm No. 2393

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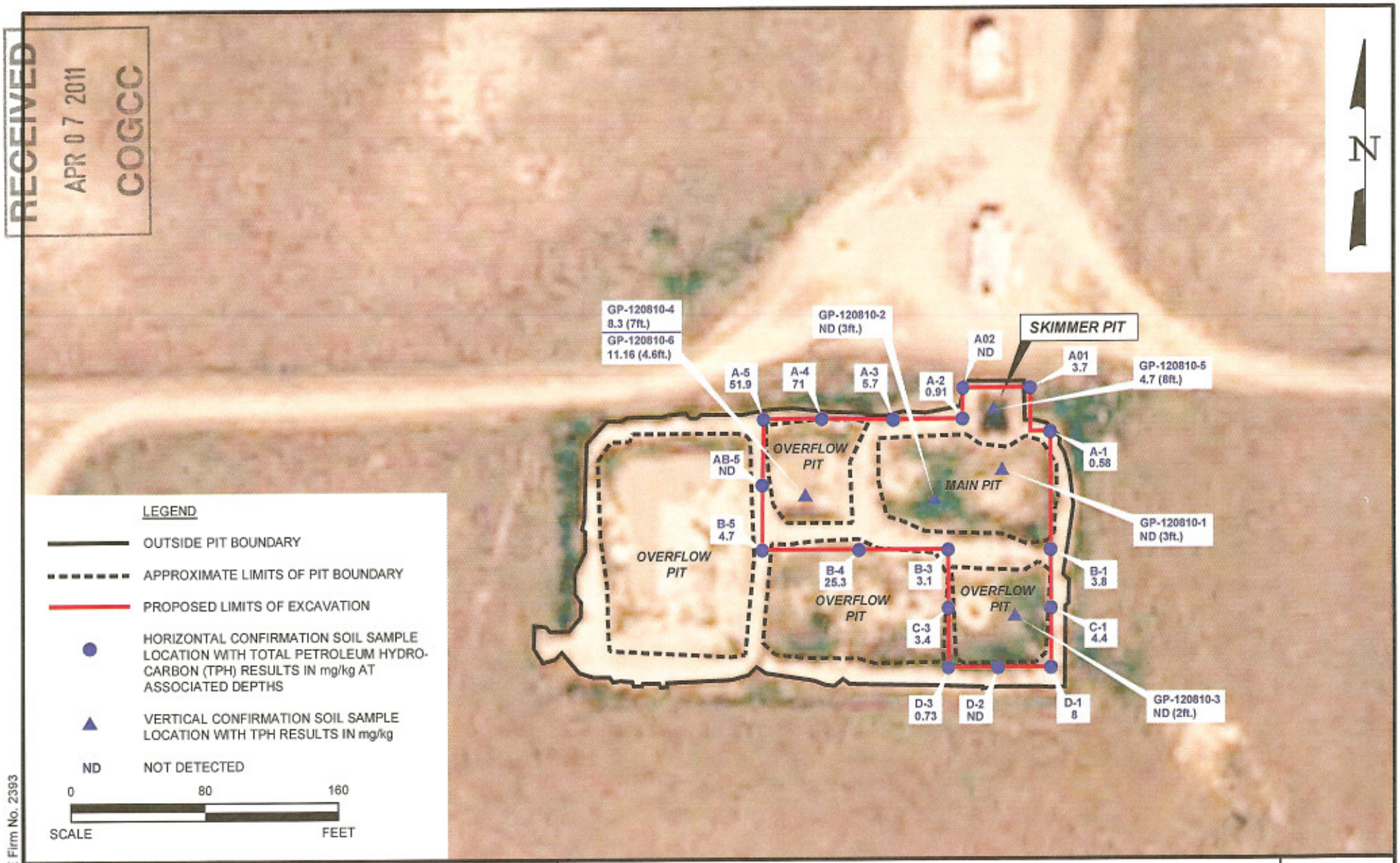

Environmental Resources Management

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FIGURE 3
PIT SAMPLE LOCATIONS AND TPH RESULTS
FACILITY ID 116251
Peetz West (68300)
Logan County, CO

ERM

ERM-Southwest, Inc. TX PE Firm No. 2393

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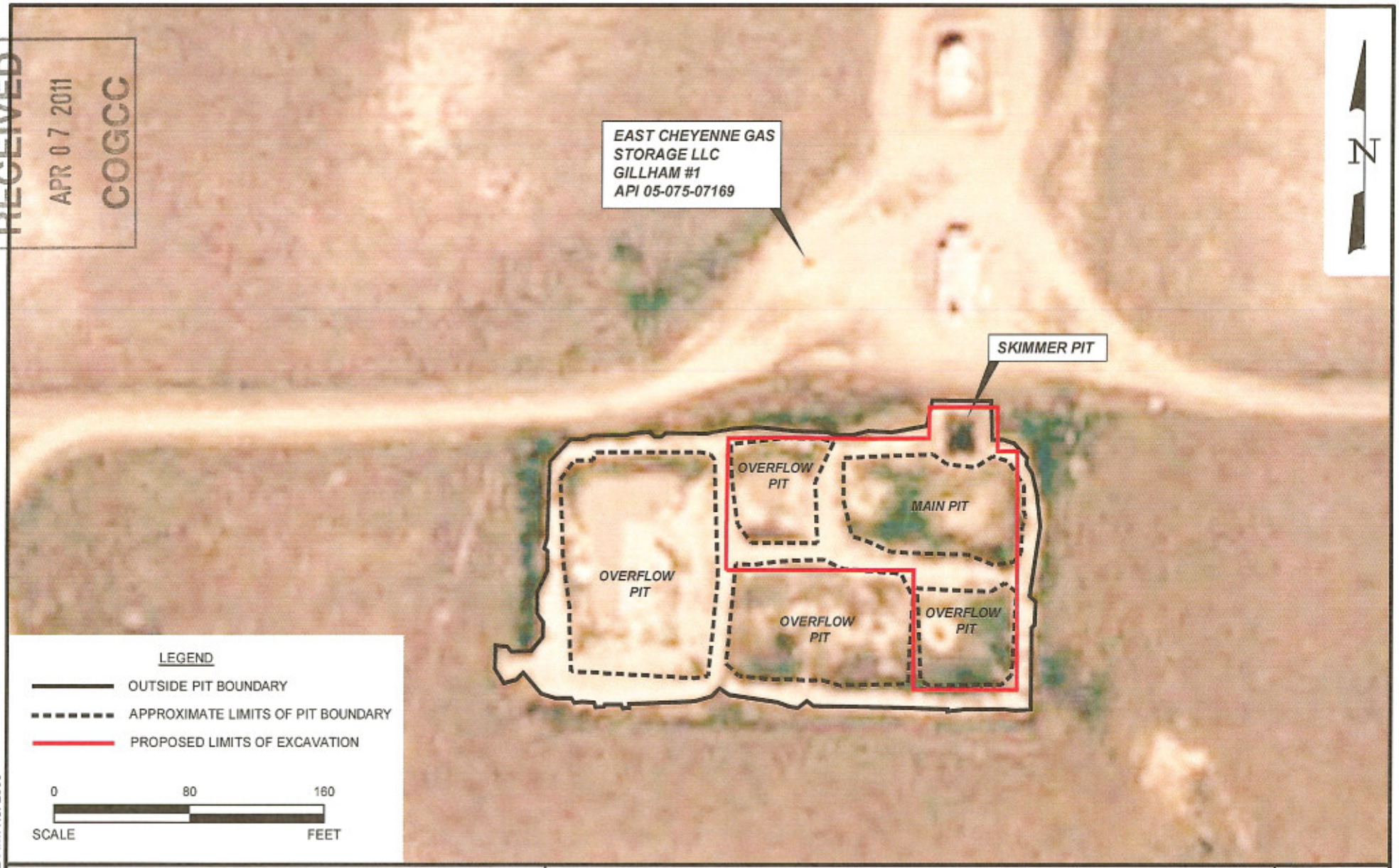

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FIGURE 4
PROPOSED SOIL EXCAVATION LIMITS
FACILITY ID 116251
Peetz West (68300)
Logan County, CO

ERM

ERM-Southwest, Inc. TX PE Firm No. 2393

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Environmental Resources Management

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FIGURE 2
PIT LOCATION MAP
FACILITY ID 116251
Peetz West (68300)
Logan County, CO

ERM

ERM-Southwest, Inc. TX PE Firm No. 2393

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Remediation Work Plan
Attachment 1

1.0 Introduction

Merchant Energy Partners, LLC (Merchant) is performing remedial activities at the Gillham Pit Site in Peetz, Colorado. A serious of internal pits was used historically to manage liquids generated from well drilling activities. The remedial activities are part of a larger remedial effort in the area that is addressing both the Gillham Pit Site and the nearby Schwake A-2 Tank Battery Pit. At Schwake, Merchant received Colorado Oil & Gas Conservation Commission (COGCC) approval (dated February 2, 2010) of a Project Manual for the construction of an on-site bioremediation landfarm to remediate total petroleum hydrocarbons (TPH) affected materials. Those activities were completed in December 2010 and the TPH-affected soil from the Schwake Pits is undergoing landfarm treatment. These two sites are located less than half-mile apart and opportunities exist to align remedial efforts between the two sites to facilitate the closure of environmental issues in one general effort.

1.1 Scope and Objectives

The scope of this remediation work plan is the removal and treatment of TPH-affected solids in the pits. These materials are located within the pit complex of the Gillham Site. No significant impact to soil outside of the pits was apparent and ground water beneath the pits is not expected to pose a risk to human health or the environment.

Specific objectives include:

- Provide an overview of the environmental conditions at the Gillham Pits to set the context for the remediation work plan;
- Develop a remediation work plan for the Gillham Pits consistent with COGCC Rule 907.e.2;
- Evaluate the engineering feasibility and potential risk to human health and the environment from the consolidated the TPH-affected materials from the Gillham Pits and Schwake Pits into the existing Schwake landfarm; and
- If consolidation is warranted, request a one-time variance of Rule 502.b.1 to allow consolidation.

1.2 Background Information for the Gillham Pit

The Gillham Pit (ID No. 116251) is located at the Kenneth Gillham lease adjacent to the Gillham No. 1 Well (PI No. 05-075-07169). Figure 1 shows the location of the site in Peetz, Colorado. The pit complex consists of five component internal pits, including a 25 feet diameter circular crude skimmer pit and a main pit with three overflow pits of varying size. Figure 2 provides a site map showing the location of the well, Main Pit, Overflow Pits, and Skimmer Pit. The pit complex is surrounded by berms that rise to approximately four feet above grade. The base of the pits is approximately one to two feet below outside grade and the internal berms are also approximately four to five feet above the pit bottoms.

1.3 Summary on Investigation Results

An investigation of the Gillham Pit was undertaken in July 2010 and described in a Form 27 Submittal to COGCC in August, 2010. As described in that report, the Skimmer Pit contains a top layer of crude-saturated soil approximately five feet in thickness, which is underlain by unstained soil with a moderate petroleum odor. The Main Pit and Overflow Pits contain small volumes of soil affected by semivolatile organic constituents (SVOCs) and indicator parameters in the upper one to three feet. As shown on Table 1, the constituents of concern that exceeded COGCC Table 910-1 limits within the Gillham Pit include:

- benzene (1 sample in the Skimmer Pit);
- benzo(a)pyrene and benzo(a)fluoranthene (detected in 3 of 16 samples);
- indento(1,2,3-cd)pyrene (1 of 16 samples);
- TPH (5 of 16 samples);
- arsenic (all 16 samples); and
- indicator parameters EC (4 of 16 samples), pH (13 of 16 samples, potentially associated with cement stabilized sand beneath the Pit), and SAR (10 of 16 samples).

In October and December 2010, Merchant completed an additional site investigation to further delineate the proposed limits of excavation. The depth of the affected materials was assessed by collecting additional soil samples below the affected material. The underlying soils exhibited no petroleum odor or apparent staining and the reported TPH concentrations did not exceed the COGCC Table 910-1 limits. Table 2 provides a summary of the soil analytical results from the additional site investigation activities. Figure 3 shows the sample locations for the additional site investigation. Appendix A contains copies of the analytical reports from the October and December sampling events.

During the excavation activities, ERM observed a hard layer consisting of what appeared as cement-stabilized sand and gravel at the base of the pits. This hard layer was apparently placed by the operator in the late 1950s or 1960s during pit construction activities. Based on sample results above and below this hard layer, it has functioned as a low permeability liner reducing the potential for liquids in the pits to migrate to the underlying subsurface soils and ground water. The elevated pH measurements detected in the overlying soil could be attributable to cement-stabilized sand in the base of the Pit. This stabilized material was found throughout the pits at a depth of a few feet below the base of each pit.

2.0 *Scope of Work*

The investigation results were used to estimate the volume of affected soil in the Skimmer Pit, Main Pit, and two Overflow Pits. Based on the pit dimensions and the two site investigation events, the pits were estimated to contain approximately 2,000 to 2,400 loose cubic yards (LCY) of TPH-affected materials. This section outlines a scope of work for Main Pit, portions of two Overflow Pits, and the Skimmer Pit that will achieve the COGCC Table 910-1 concentration limits. Figure 4 shows the location of each pit and the remedial boundaries.

The proposed pit remediation includes the following steps:

- Excavate stained soil to the maximum depth of impact;
- Transport soil to the landfarm located at the Schwake A-1 Tank Battery treatment area;
- Collect confirmation soil samples of excavation side walls and bottom, obtain laboratory analysis, and confirm constituents of concern for the limits of excavation are below COGCC Table 910-1 limits;
- Manage soil in landfarm in accordance with procedures described below under Landfarm Bioremediation Management;
- Verify treatment has been effective;
- Once the treatment has been deemed effective, backfill the pit in lifts with treated soil from landfarm, compact, and slope to drain at surface;
- Cover pit with graded topsoil to direct surface water runoff away from the backfilled pit; and
- Seed the graded area with native grasses using hydromulch in order to stabilize the soil and restore it for suitable agricultural or recreational use.

These steps are consistent with the COGCC-approved procedures for the Schwake A-2 Tank Battery Site work.

3.0 Ground Water

Ground water remediation is not proposed because no significant releases are known to exist from the Gillham Pit that could impact human health and the environment. The closest know water well was replaced on October 19, 2009 at the Nelson residence to address the potential for contact with affected ground water from the pits. The well is completed in the Pierre Shale from 820-1020 ft and the screened zone is isolated by 570 ft of clay and shale from the High Plains (Ogallala) Aquifer in which the old Nelson well (total depth of 250 ft) was completed. The cement stabilized sand beneath the Gillham Pits has reduced the potential for vertical migration of constituents from the pit materials to the shallow ground water. In addition, the concentrations of the concern may be beneath levels that would represent a significant groundwater protection issues.

At the completion of the affected material remediation activities, the material will be placed back into the pits and compacted to form a low permeability cover. This effect is intended to address further the potential for soil impact to ground water.

4.0 *Treatment of Affected Materials*

Merchant proposes to address the TPH-affected solid materials in two ways: (1) fill a segregated and vacant capacity in the in the Schwake A-1 Tank Battery landfarm treatment area; and (2) transport and dispose any additional material (beyond what can be effectively treated in the landfarm or additional volumes) in an off-site landfill. Liquids in the Skimmer Pit will be managed separately in an off-site disposal facility. The purpose of this section is to outline the technical approach for soil and liquid.

4.1 *Overview of Schwake Landfarm Treatment Area*

In December 2010, two landfarm cells were constructed in accordance with the COGCC approved Project Manual for remedial activities at the Schwake A-2 Tank Battery. The two cells have an estimated volume capacity of 4,400 LCY. Approximately 2,600 LCY of TPH-affected materials was excavated and placed into the two cells for bioremediation. Based on field measurements, the existing landfarm cell has an approximate capacity of 1,800 LCY remaining.

Merchant proposes to construct an internal earthen clay berm to create a third cell within the landfarm treatment area. This berm will segregate the affected material removed from the Gillham Pit from the material removed from the Schwake Main Pit. The berm will be constructed in accordance with the construction specifications identified in the Schwake A-2 Tank Battery Project Manual.

4.2 *Landfarm Treatment Operations*

The most significant treatment in the landfarm is expected to occur during the relatively warm months of April through October of each year of operation. The landfarm will be divided into three cells. Two cells will contain material from the Schwake A-2 Tank Battery and one cell will contain material from the Gillham Pit. Each cell will be scheduled on a regular, rotating basis to be aerated and watered during the treatment season. The segregation of the material into separate cells will allow for the closure of either site without impact to the bioremediation of the other site.

Soil samples of the Gillham Pit materials will be collected within the landfarm according to the schedule outlined below. Unless otherwise noted, samples will be collected and analyzed for desiel range organic TPH, gasoline range organic TPH, benzene, benzo(a)pyrene, benzo(a)fluoranthene, and indento(1,2,3-cd)pyrene.

- *Prior to Construction* - To establish a baseline of existing soil conditions, samples were collected from the area where the landfarm was constructed in November 2010. These soil samples were only analyzed for TPH.
- *Prior to Beginning Treatment* - Once the affected material is placed, spread, and initially tilled, a second round of sampling will occur to establish a baseline condition of the affected soil at the beginning of treatment. Samples will be collected and evaluated for moisture content. This will indicate whether supplemental moisture needs to be added to one or more areas of the landfarm.

- *During Treatment* - Over the anticipated seven month treatment season, samples will be collected at the beginning of the treatment season (April), in June and August, and in October when a sample set is collected at the end of the treatment season. Samples will be collected and evaluated for moisture content on a weekly basis or other schedule deemed appropriate to monitor soil moisture content. This will indicate whether supplemental moisture needs to be added to one or more areas of the landfarm.
- *Confirmation Samples* - To verify completion of the required treatment program and compliance with Rule 907(e)(2), a final set of confirmation samples will be collected from the landfarm. A set of samples of the underlying soils will be collected and compared to the initial baseline samples at the closure of the cells to confirm no significant releases have occurred from the landfarm.

4.3 Closure Criterion

Treatment in a cell will be considered complete when the following criteria have been met, consistent with COGCC Table 910-1:

- total TPH concentration in the samples are less than the 500 mg/kg;
- benzene concentrations are less then 0.17 mg/kg;
- benzo(a)pyrene concentrations are less then 0.022 mg/kg;
- benzo(a)fluoranthene are less then 2.2 mg/kg; and
- indento(1,2,3-cd)pyrene concentrations are less then 0.22 mg/kg.

At that point, the treated landfarm material and the drainage layer will be removed and placed back into the pits from which it originally came. PVC and other similar materials will be disposed off site in an appropriate landfill facility.

Tables

March 8, 2011
Project No. 0104362

Environmental Resources Management Southwest, Inc.
15810 Park Ten Place, Suite 300
Houston, Texas 77084-5140
(281) 600-1000

TABLE 1

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-A-1-2 Result	B-A-1-2 RL	B-A-1-2 Qual.	B-A-2-1/2 Result	B-A-2-1/2 RL	B-A-2-1/2 Qual.	B-A-3-1/2 Result	B-A-3-1/2 RL	B-A-3-1/2 Qual.	B-B-1-1/2 Result	B-B-1-1/2 RL	B-B-1-1/2 Qual.
Organic Compounds in Soil														
Volatile Organic Compounds														
Benzene	µg/kg	170	ND	130		ND	6.3		ND	6.2		ND	5.8	
Toluene	µg/kg	85000	ND	250		ND	13		ND	12		ND	12	
Ethylbenzene	µg/kg	100000	ND	250		ND	13		ND	12		ND	12	
Xylenes, m,p	µg/kg	—	ND	500		ND	25		ND	25		ND	23	
Xylene, o	µg/kg	—	ND	250		ND	13		ND	12		ND	12	
Xylenes (total)	µg/kg	175000	ND			ND			ND			ND		
Semivolatile Organic Compounds														
Acenaphthene	µg/kg	1000000	ND	5900		ND	12000		ND	6200		ND	5900	
Acenaphthylene	µg/kg	-	ND	5900		ND	12000		ND	6200		ND	5900	
Anthracene	µg/kg	1000000	ND	5900		ND	12000		ND	6200		ND	5900	
Benzo(a)anthracene	µg/kg	220	189	590	J	ND	1200		ND	620		ND	590	
Benzo(a)pyrene	µg/kg	22	**281**	590	J	ND	1200		ND	620		ND	590	
Benzo(b)fluoranthene	µg/kg	220	**443**	590	J	ND	1200		ND	620		ND	590	
Benzo(g,h,i)perylene	µg/kg	—	630	590		1580	1200		517	620	J	307	590	J
Benzo(k)fluoranthene	µg/kg	2200	221	590	J	ND	1200		ND	620		ND	590	
Chrysene	µg/kg	22000	802	590		ND	1200		ND	620		ND	590	
Dibenzo(a,h)anthracene	µg/kg	22	ND	590		ND	1200		ND	620		ND	590	
Fluoranthene	µg/kg	1000000	ND	5900		ND	12000		ND	6200		ND	5900	
Fluorene	µg/kg	1000000	ND	5900		ND	12000		ND	6200		ND	5900	
Indeno(1,2,3-cd)pyrene	µg/kg	220	ND	590		ND	1200		ND	620		ND	590	
1-Methylnaphthalene	µg/kg	—	ND	5900		ND	12000		ND	6200		ND	5900	
2-Methylnaphthalene	µg/kg	—	ND	5900		ND	12000		ND	6200		ND	5900	
Naphthalene	µg/kg	23000	ND	5900		ND	12000		ND	6200		ND	5900	
Phenanthrene	µg/kg	—	ND	5900		ND	12000		ND	6200		ND	5900	
Pyrene	µg/kg	1000000	ND	5900		ND	12000		ND	6200		ND	5900	
Total Petroleum Hydrocarbons														
TPH-GRO	mg/kg	—	144	6.7		31	7.5		ND	7.3		ND	6.6	
TPH-DRO	mg/kg	—	3270	78		1740	84		433	16		NA	NA	
TPH	mg/kg	500	**3414**			**1771**			433			ND		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-A-1-2 Result	RL	Qual.	B-A-2-1/2 Result	RL	Qual.	B-A-3-1/2 Result	RL	Qual.	B-B-1-1/2 Result	RL	Qual.
Metals in Soil														
Arsenic	mg/kg	0.39	**2.8**	0.41		**2.5**	0.41		**2**	0.44		**1.1**	0.46	
Barium	mg/kg	15,000	106	1		130	1		150	1.1		127	1.1	
Cadmium	mg/kg	70	<1.0	1		<1.0	1		<1.1	1.1		<1.1	1.1	
Chromium (total)	mg/kg	—	6.6	1		9.4	1		9.5	1.1		7.4	1.1	
Chromium (VI)	mg/kg	23	<2.3	2.3		<2.5	2.5		<2.4	2.4		<2.3	2.3	
Chromium (III)	mg/kg	120000	6.1	3.3		8.7	3.5		8.7	3.5		6.7	3.4	
Copper	mg/kg	3100	7	0.51		9.8	0.51		9	0.56		7.2	0.57	
Lead	mg/kg	400	7.9	5.1		40.4	5.1		9.5	5.6		7.4	5.7	
Mercury	mg/kg	23	<0.074	0.074		0.09	0.07		0.1	0.078		<0.077	0.077	
Nickel	mg/kg	1600	6.1	3.1		8.1	3.1		7	3.3		5.9	3.4	
Selenium	mg/kg	390	<5.1	5.1		<5.1	5.1		<5.6	5.6		<5.7	5.7	
Silver	mg/kg	390	<3.1	3.1		<3.1	3.1		<3.3	3.3		<3.4	3.4	
Zinc	mg/kg	23000	20.3	3.1		27.2	3.1		26.4	3.3		18.6	3.4	
Inorganic Parameters in Soil														
Redox Potential	mv	—	288			327			344			353		
Solids, Percent	%	—	85.5			79.7			81			86.1		
Solids, Percent c	%	—	85.1			81.9			81			84.9		
Specific Conductivity	umhos/cm	4000	2950	1		2250	1		739	1		375	1	
pH	su	6 ≤ pH ≤ 9	8.85			8.71			**9.13**			**9.01**		
SAR Metals														
Calcium	mg/l	—	190	2		183	2		46.2	2		29.7	2	
Magnesium	mg/l	—	12.8	1		10.3	1		3.31	1		1.45	1	
Sodium	mg/l	—	428	2		326	2		118	2		44.8	2	
Sodium Adsorption Ratio	ratio	12	8.1			6.34			4.52			2.18		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-B-2-2			B-B-3-2			B-B-4-2			B-B-5-2		
			Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
Organic Compounds in Soil														
Volatile Organic Compounds														
Benzene	µg/kg	170	ND	5.8		ND	5.9		ND	5.6		ND	5.6	
Toluene	µg/kg	85000	ND	12		ND	12		ND	11		ND	11	
Ethylbenzene	µg/kg	100000	ND	12		ND	12		ND	11		ND	11	
Xylenes, m,p	µg/kg	—	ND	23		ND	23		ND	22		ND	23	
Xylene, o	µg/kg	—	ND	12		ND	12		ND	11		ND	11	
Xylenes (total)	µg/kg	175000	ND			ND			ND			ND		
Semivolatile Organic Compounds														
Acenaphthene	µg/kg	1000000	ND	2900		ND	240		ND	220		ND	120	
Acenaphthylene	µg/kg	-	ND	2900		ND	240		ND	220		ND	120	
Anthracene	µg/kg	1000000	ND	2900		ND	240		ND	220		ND	120	
Benzo(a)anthracene	µg/kg	220	ND	290		ND	24		ND	22		ND	12	
Benzo(a)pyrene	µg/kg	22	ND	290		ND	24		ND	22		ND	12	
Benzo(b)fluoranthene	µg/kg	220	ND	290		ND	24		ND	22		ND	12	
Benzo(g,h,i)perylene	µg/kg	—	205	290	J	26.2	24		21.6	22	J	7.5	12	J
Benzo(k)fluoranthene	µg/kg	2200	ND	290		ND	24		ND	22		ND	12	
Chrysene	µg/kg	22000	ND	290		ND	24		ND	22		ND	12	
Dibenzo(a,h)anthracene	µg/kg	22	ND	290		ND	24		ND	22		ND	12	
Fluoranthene	µg/kg	1000000	ND	2900		ND	240		ND	220		ND	120	
Fluorene	µg/kg	1000000	ND	2900		ND	240		ND	220		ND	120	
Indeno(1,2,3-cd)pyrene	µg/kg	220	ND	290		ND	24		ND	22		ND	12	
1-Methylnaphthalene	µg/kg	—	ND	2900		ND	240		ND	220		ND	120	
2-Methylnaphthalene	µg/kg	—	ND	2900		ND	240		ND	220		ND	120	
Naphthalene	µg/kg	23000	ND	2900		ND	240		ND	220		ND	120	
Phenanthrene	µg/kg	—	ND	2900		ND	240		ND	220		ND	120	
Pyrene	µg/kg	1000000	ND	2900		ND	240		ND	220		ND	120	
Total Petroleum Hydrocarbons														
TPH-GRO	mg/kg	—	ND	6.6		ND	14		ND	6.1		ND	6.3	
TPH-DRO	mg/kg	—	250	15		43	16		39.8	15		ND	15	
TPH	mg/kg	500	250			43			39.8			ND		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-B-2-2 Result	B-B-2-2 RL	B-B-2-2 Qual.	B-B-3-2 Result	B-B-3-2 RL	B-B-3-2 Qual.	B-B-4-2 Result	B-B-4-2 RL	B-B-4-2 Qual.	B-B-5-2 Result	B-B-5-2 RL	B-B-5-2 Qual.
Metals in Soil														
Arsenic	mg/kg	0.39	**1.2**	0.42		**1.7**	0.46		**0.83**	0.41		**2**	0.36	
Barium	mg/kg	15,000	137	1.1		161	1.1		185	1		88.2	0.91	
Cadmium	mg/kg	70	<1.1	1.1		<1.1	1.1		<1.0	1		<0.91	0.91	
Chromium (total)	mg/kg	—	8.1	1.1		10.9	1.1		6.5	1		4.5	0.91	
Chromium (VI)	mg/kg	23	<2.3	2.3		<2.3	2.3		<2.2	2.2		<2.2	2.2	
Chromium (III)	mg/kg	120000	6.9	3.4		9.3	3.4		5.2	3.2		4.5	3.1	
Copper	mg/kg	3100	8.1	0.53		10.6	0.57		6.7	0.51		5.9	0.46	
Lead	mg/kg	400	8.3	5.3		9.9	5.7		5.9	5.1		<4.6	4.6	
Mercury	mg/kg	23	<0.070	0.07		<0.078	0.078		<0.073	0.073		<0.085	0.085	
Nickel	mg/kg	1600	6.6	3.2		9.6	3.4		5.2	3.1		4.4	2.7	
Selenium	mg/kg	390	<5.3	5.3		<5.7	5.7		<5.1	5.1		<4.6	4.6	
Silver	mg/kg	390	<3.2	3.2		<3.4	150		<3.1	3.1		<2.7	2.7	
Zinc	mg/kg	23000	21	3.2		30.3	3.4		15.9	3.1		10	2.7	
Inorganic Parameters in Soil														
Redox Potential	mv	—	315			292			369			383		
Solids, Percent	%	—	86.1			85.4			90			88.5		
Solids, Percent c	%	—	86.3			83.8			89.7			84.2		
Specific Conductivity	umhos/cm	4000	326	1		**11300**	1		2460	1		312	1	
pH	su	6 ≤ pH ≤ 9	**9.35**			**9.77**			**9.65**			**9.31**		
SAR Metals														
Calcium	mg/l	—	23.8	2		97.6	2		25.5	2		47.4	2	
Magnesium	mg/l	—	1.71	1		3.58	1		1.39	1		2.37	1	
Sodium	mg/l	—	60.1	2		2780	2		555	2		44.4	2	
Sodium Adsorption Ratio	ratio	12	3.2			**75.2**			**29**			1.7		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-C-1-2 Result	B-C-1-2 RL	B-C-1-2 Qual.	B-C-1-2(DUP) Result	B-C-1-2(DUP) RL	B-C-1-2(DUP) Qual.	B-C-2-2 Result	B-C-2-2 RL	B-C-2-2 Qual.	B-D-1-2 Result	B-D-1-2 RL	B-D-1-2 Qual.
Organic Compounds in Soil														
Volatile Organic Compounds														
Benzene	µg/kg	170	ND	6		ND	6		ND	140		ND	5.9	
Toluene	µg/kg	85000	ND	12		ND	12		ND	270		ND	12	
Ethylbenzene	µg/kg	100000	ND	12		ND	12		ND	270		ND	12	
Xylenes, m,p	µg/kg	—	ND	24		ND	24		ND	550		ND	23	
Xylene, o	µg/kg	—	ND	12		ND	12		ND	270		ND	12	
Xylenes (total)	µg/kg	175000	ND			ND			ND			ND		
Semivolatile Organic Compounds														
Acenaphthene	µg/kg	1000000	ND	1200		ND	3000		ND	16000		ND	230	
Acenaphthylene	µg/kg	-	ND	1200		ND	3000		ND	16000		ND	230	
Anthracene	µg/kg	1000000	ND	1200		ND	3000		ND	16000		ND	230	
Benzo(a)anthracene	µg/kg	220	ND	120		ND	300		ND	1600		ND	23	
Benzo(a)pyrene	µg/kg	22	ND	120		ND	300		**807**	1600	J	ND	23	
Benzo(b)fluoranthene	µg/kg	220	ND	120		ND	300		**1290**	1600	J	ND	23	
Benzo(g,h,i)perylene	µg/kg	—	159	120		366	300		2550	1600		13.2	23	J
Benzo(k)fluoranthene	µg/kg	2200	ND	120		ND	300		ND	1600		ND	23	
Chrysene	µg/kg	22000	ND	120		ND	300		2520	1600		ND	23	
Dibenzo(a,h)anthracene	µg/kg	22	ND	120		ND	300		ND	1600		ND	23	
Fluoranthene	µg/kg	1000000	ND	1200		ND	3000		ND	16000		ND	230	
Fluorene	µg/kg	1000000	ND	1200		ND	3000		ND	16000		ND	230	
Indeno(1,2,3-cd)pyrene	µg/kg	220	ND	120		99.6	300	J	**667**	1600	J	ND	23	
1-Methylnaphthalene	µg/kg	—	ND	1200		ND	3000		ND	16000		ND	230	
2-Methylnaphthalene	µg/kg	—	ND	1200		ND	3000		ND	16000		ND	230	
Naphthalene	µg/kg	23000	ND	1200		ND	3000		ND	16000		ND	230	
Phenanthrene	µg/kg	—	ND	1200		ND	3000		ND	16000		ND	230	
Pyrene	µg/kg	1000000	ND	1200		ND	3000		ND	16000		ND	230	
Total Petroleum Hydrocarbons														
TPH-GRO	mg/kg	—	ND	7		ND	6.8		22.3	7.2		ND	6.7	
TPH-DRO	mg/kg	—	523	80		317	79		14900	830		37.2	16	
TPH	mg/kg	500	**523**			317			**14922.3**			37.2		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-C-1-2			B-C-1-2(DUP)			B-C-2-2			B-D-1-2		
			Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
Metals in Soil														
Arsenic	mg/kg	0.39	**2.3**	0.47		**2.5**	0.45		**2.6**	0.47		**1.4**	0.43	
Barium	mg/kg	15,000	156	1.2		168	1.1		167	1.2		202	1.1	
Cadmium	mg/kg	70	<1.2	1.2		<1.1	1.1		<1.2	1.2		<1.1	1.1	
Chromium (total)	mg/kg	—	11	1.2		10.1	1.1		10.8	1.2		8.9	1.1	
Chromium (VI)	mg/kg	23	<2.4	2.4		<2.3	2.3		<2.1	2.1		<2.3	2.3	
Chromium (III)	mg/kg	120000	11	3.6		9.3	3.4		10	3.3		8.9	3.4	
Copper	mg/kg	3100	9.5	0.58		10.2	0.57		10.4	0.59		8	0.54	
Lead	mg/kg	400	9.1	5.8		11.9	5.7		11.5	5.9		8.4	5.4	
Mercury	mg/kg	23	<0.089	0.089		<0.071	0.071		0.12	0.083		<0.077	0.077	
Nickel	mg/kg	1600	9.1	3.5		8.8	3.4		9	3.5		7.7	3.3	
Selenium	mg/kg	390	<5.8	5.8		<5.7	5.7		<5.9	5.9		<5.4	5.4	
Silver	mg/kg	390	<3.5	3.5		<3.4	3.4		<3.5	3.5		<3.3	3.3	
Zinc	mg/kg	23000	28.3	3.5		33.8	3.4		38.9	3.5		24.2	3.3	
Inorganic Parameters in Soil														
Redox Potential	mv	—	312			343			356			287		
Solids, Percent	%	—	83			83.8			80.5			85.3		
Solids, Percent c	%	—	82.6			84.7			78.7			85.3		
Specific Conductivity	umhos/cm	4000	**9370**	1		**11500**	1		3040	1		**4110**	1	
pH	su	6 ≤ pH ≤ 9	**9.67**			**9.67**			**9.38**			**10.1**		
SAR Metals														
Calcium	mg/l	—	86.2	2		141	2		36.1	2		7.15	2	
Magnesium	mg/l	—	3.24	1		6.05	1		2.48	1		<1.0	1	
Sodium	mg/l	—	2190	2		2760	2		669	2		991	2	
Sodium Adsorption Ratio	ratio	12	**63**			**61.8**			**29**			**95.8**		

NOTES:

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2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-D-1-2(DUP) Result	RL	Qual.	B-D-2 Result	RL	Qual.	B-E-2 Result	RL	Qual.	B-F-2 Result	RL	Qual.
Organic Compounds in Soil														
Volatile Organic Compounds														
Benzene	µg/kg	170	ND	5.9		ND	5.8		**399**	35		ND	5.9	
Toluene	µg/kg	85000	ND	12		ND	12		161	70		ND	12	
Ethylbenzene	µg/kg	100000	ND	12		ND	12		304	70		ND	12	
Xylenes, m,p	µg/kg	—	ND	24		ND	23		633	140		ND	24	
Xylene, o	µg/kg	—	ND	12		ND	12		504	70		ND	12	
Xylenes (total)	µg/kg	175000	ND			ND			1137			ND		
Semivolatile Organic Compounds														
Acenaphthene	µg/kg	1000000	ND	230		ND	2400		ND	13000		ND	120	
Acenaphthylene	µg/kg	-	ND	230		ND	2400		ND	13000		ND	120	
Anthracene	µg/kg	1000000	ND	230		ND	2400		ND	13000		ND	120	
Benzo(a)anthracene	µg/kg	220	ND	23		ND	240		ND	1300		ND	12	
Benzo(a)pyrene	µg/kg	22	ND	23		ND	240		**459**	1300	J	ND	12	
Benzo(b)fluoranthene	µg/kg	220	ND	23		ND	240		**732**	1300	J	3.9	12	J
Benzo(g,h,i)perylene	µg/kg	—	12.2	23	J	281	240		1310	1300		ND	12	
Benzo(k)fluoranthene	µg/kg	2200	ND	23		ND	240		ND	1300		ND	12	
Chrysene	µg/kg	22000	ND	23		ND	240		1620	1300		ND	12	
Dibenzo(a,h)anthracene	µg/kg	22	ND	23		ND	240		ND	1300		ND	12	
Fluoranthene	µg/kg	1000000	ND	230		ND	2400		ND	13000		ND	120	
Fluorene	µg/kg	1000000	ND	230		ND	2400		ND	13000		ND	120	
Indeno(1,2,3-cd)pyrene	µg/kg	220	ND	23		ND	240		ND	1300		ND	12	
1-Methylnaphthalene	µg/kg	—	ND	230		ND	2400		6980	13000	J	ND	120	
2-Methylnaphthalene	µg/kg	—	ND	230		ND	2400		8490	13000	J	ND	120	
Naphthalene	µg/kg	23000	ND	230		ND	2400		5140	13000	J	ND	120	
Phenanthrene	µg/kg	—	ND	230		ND	2400		ND	13000		ND	120	
Pyrene	µg/kg	1000000	ND	230		ND	2400		ND	13000		ND	120	
Total Petroleum Hydrocarbons														
TPH-GRO	mg/kg	—	ND	6.7		ND	6.5		829	9.8		ND	6.8	
TPH-DRO	mg/kg	—	47.8	16		205	15		11800	200		ND	16	
TPH	mg/kg	500	47.8			205			**12629**			ND		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-D-1-2(DUP) Result	RL	Qual.	B-D-2 Result	RL	Qual.	B-E-2 Result	RL	Qual.	B-F-2 Result	RL	Qual.
Metals in Soil														
Arsenic	mg/kg	0.39	**1.6**	0.44		**1.2**	0.44		**1.9**	0.56		**2.9**	0.45	
Barium	mg/kg	15,000	205	1.1		106	1.1		88	1.4		136	1.1	
Cadmium	mg/kg	70	<1.1	1.1		<1.1	1.1		<1.4	1.4		<1.1	1.1	
Chromium (total)	mg/kg	—	8.7	1.1		6.1	1.1		9	1.4		9.1	1.1	
Chromium (VI)	mg/kg	23	<2.3	2.3		<2.3	2.3		<2.9	2.9		<2.4	2.4	
Chromium (III)	mg/kg	120000	8.7	3.4		6.1	3.4		8.5	4.3		8.5	3.5	
Copper	mg/kg	3100	8	0.55		5.4	0.54		12.3	0.7		8.2	0.56	
Lead	mg/kg	400	7.8	5.5		6.3	5.4		65	7		8.9	5.6	
Mercury	mg/kg	23	<0.070	0.07		<0.072	0.072		0.24	0.085		<0.070	0.07	
Nickel	mg/kg	1600	7.3	3.3		4.8	3.3		16.1	4.2		6.9	3.4	
Selenium	mg/kg	390	<5.5	5.5		<5.4	5.4		<7.0	7		<5.6	5.6	
Silver	mg/kg	390	<3.3	3.3		<3.3	3.3		<4.2	4.2		<3.4	3.4	
Zinc	mg/kg	23000	23.6	3.3		17	3.3		58.8	4.2		26.8	3.4	
Inorganic Parameters in Soil														
Redox Potential	mv	—	282			310			272			312		
Solids, Percent	%	—	85			86.7			66.3			84.6		
Solids, Percent c	%	—	85.8			84.2			78.5			84.2		
Specific Conductivity	umhos/cm	4000	**6440**	1		1160	1		2930	1		980	1	
pH	su	6 ≤ pH ≤ 9	**10.04**			**10.02**			**9.64**			**9.43**		
SAR Metals														
Calcium	mg/l	—	10.4	2		23	2		4.41	2		<2.0	2	
Magnesium	mg/l	—	1.34	1		4.39	1		<1.0	1		<1.0	1	
Sodium	mg/l	—	1460	2		255	2		698	2		188	2	
Sodium Adsorption Ratio	ratio	12	**113**			**12.8**			**84.3**			**33**		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

		Sample ID:	B-G-2			B-H-2			Summary Statistics	
Analysis	Units	COGCC Limit	Result	RL	Qual.	Result	RL	Qual.	No. Detections	No. Outside Limits
Organic Compounds in Soil										
Volatile Organic Compounds										
Benzene	µg/kg	170	ND	6.1		ND	5.7		1	1
Toluene	µg/kg	85000	ND	12		ND	11		1	0
Ethylbenzene	µg/kg	100000	ND	12		ND	11		1	0
Xylenes, m,p	µg/kg	—	ND	24		ND	23		1	—
Xylene, o	µg/kg	—	ND	12		ND	11		1	—
Xylenes (total)	µg/kg	175000	ND			ND			1	0
Semivolatile Organic Compounds										
Acenaphthene	µg/kg	1000000	ND	120		ND	110		0	0
Acenaphthylene	µg/kg	-	ND	120		ND	110		0	—
Anthracene	µg/kg	1000000	ND	120		ND	110		0	0
Benzo(a)anthracene	µg/kg	220	ND	12		4.6	11	J	2	0
Benzo(a)pyrene	µg/kg	22	ND	12		6.2	11	J	4	3
Benzo(b)fluoranthene	µg/kg	220	3.8	12	J	7.8	11	J	6	3
Benzo(g,h,i)perylene	µg/kg	—	ND	12		11.1	11		14	—
Benzo(k)fluoranthene	µg/kg	2200	ND	12		6.5	11	J	2	0
Chrysene	µg/kg	22000	ND	12		6.2	11	J	4	0
Dibenzo(a,h)anthracene	µg/kg	22	ND	12		5.8	11	J	1	0
Fluoranthene	µg/kg	1000000	ND	120		ND	110		0	0
Fluorene	µg/kg	1000000	ND	120		ND	110		0	0
Indeno(1,2,3-cd)pyrene	µg/kg	220	ND	12		7.5	11	J	2	1
1-Methylnaphthalene	µg/kg	—	ND	120		ND	110		1	—
2-Methylnaphthalene	µg/kg	—	ND	120		ND	110		1	—
Naphthalene	µg/kg	23000	ND	120		ND	110		1	0
Phenanthrene	µg/kg	—	ND	120		ND	110		0	—
Pyrene	µg/kg	1000000	ND	120		ND	110		0	0
Total Petroleum Hydrocarbons										
TPH-GRO	mg/kg	—	ND	7.1		ND	6.4		4	—
TPH-DRO	mg/kg	—	ND	16		43	15		12	—
TPH	mg/kg	500	ND			43			12	5

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 1 (Cont'd)

Summary of Soil Analytical Results

Gillham Pit #117251
Peetz, Colorado

		Sample ID:	B-G-2			B-H-2			Summary Statistics	
Analysis	Units	COGCC Limit	Result	RL	Qual.	Result	RL	Qual.	No. Detections	No. Outside Limits
Metals in Soil										
Arsenic	mg/kg	0.39	**1.3**	0.47		**2.6**	0.43		16	16
Barium	mg/kg	15,000	160	1.2		140	1.1		16	0
Cadmium	mg/kg	70	<1.2	1.2		<1.1	1.1		0	0
Chromium (total)	mg/kg	—	9.6	1.2		8.2	1.1		16	—
Chromium (VI)	mg/kg	23	<2.4	2.4		<2.3	2.3		0	0
Chromium (III)	mg/kg	120000	9	3.6		7.8	3.4		16	0
Copper	mg/kg	3100	8.6	0.59		7.5	0.54		16	0
Lead	mg/kg	400	9.4	5.9		8.3	5.4		15	0
Mercury	mg/kg	23	<0.069	0.069		<0.072	0.072		4	0
Nickel	mg/kg	1600	6.7	3.5		6.7	3.2		16	0
Selenium	mg/kg	390	<5.9	5.9		<5.4	5.4		0	0
Silver	mg/kg	390	<3.5	3.5		<3.2	3.2		0	0
Zinc	mg/kg	23000	27.8	3.5		23.8	3.2		16	0
Inorganic Parameters in Soil										
Redox Potential	mv	—	391			342			—	—
Solids, Percent	%	—	82.1			87.6			—	—
Solids, Percent c	%	—	82.8			87.8			—	—
Specific Conductivity	umhos/cm	4000	**6030**	1		2620	1		16	4
pH	su	6 ≤ pH ≤ 9	6.19			**9.26**			16	13
SAR Metals										
Calcium	mg/l	—	61.4	2		25.9	2		15	—
Magnesium	mg/l	—	21.2	1		4.52	1		13	—
Sodium	mg/l	—	1280	2		490	2		16	—
Sodium Adsorption Ratio	ratio	12	**35.9**			**23.3**			16	10

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detction limts.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedences are shown in bold.

TABLE 2

Summary of Soil Analytical Results for Excavation Limits

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	A-1 Result	A-1 SDL	A-1 Qual.	A-2 Result	A-2 SDL	A-2 Qual.	A-3 Result	A-3 SDL	A-3 Qual.	A-4 Result	A-4 SDL	A-4 Qual.
Organic Compounds in Soil														
Total Petroleum Hydrocarbons														
TPH- Diesel Range	mg/kg	—	ND	0.55		ND	0.52		1.1	0.58	J	27	0.59	
TPH - Motor Oil Range	mg/kg	—	0.58	0.55	J	0.91	0.52	J	4.6	0.58		44	0.59	
TPH-Gasoline Range	mg/kg	—	ND	0.02		ND	0.021		ND	0.58		ND	0.024	
TPH	mg/kg	500	0.58			0.91			5.7			71		

Analysis	Units	Sample ID: COGCC Limit	GP-120810-1 Result	GP-120810-1 SDL	GP-120810-1 Qual.	GP-120810-2 Result	GP-120810-2 SDL	GP-120810-2 Qual.	GP-120810-3 Result	GP-120810-3 SDL	GP-120810-3 Qual.	GP-120810-4 Result	GP-120810-4 SDL	GP-120810-4 Qual.
Organic Compounds in Soil														
Total Petroleum Hydrocarbons														
TPH- Diesel Range	mg/kg	—	ND	0.58		ND	0.55		ND	0.56		8.3	0.55	
TPH - Motor Oil Range	mg/kg	—	NA			NA			NA			NA		
TPH-Gasoline Range	mg/kg	—	ND	0.023		ND	0.022		ND	0.022		0.082	0.022	
TPH	mg/kg	500	ND			ND			ND			8.382		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detection limits.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedances are shown in bold.

TABLE 2 (Cont'd)

Summary of Soil Analytical Results for Excavation Limits

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	A-5			B-1			B-3			B-4		
			Result	SDL	Qual.	Result	SDL	Qual.	Result	SDL	Qual.	Result	SDL	Qual.
Organic Compounds in Soil														
Total Petroleum Hydrocarbons														
TPH- Diesel Range	mg/kg	—	9.9	0.6		ND	0.59		ND	0.6		3.3	0.53	
TPH - Motor Oil Range	mg/kg	—	42	0.6		3.8	0.59	J	3.1	0.6	J	22	0.53	
TPH-Gasoline Range	mg/kg	—	ND	0.024		ND	0.023		ND	0.024		ND	0.021	
TPH	mg/kg	500	51.9			3.8			3.1			25.3		

Analysis	Units	Sample ID: COGCC Limit	GP-120810-5			GP-120810-6		
			Result	SDL	Qual.	Result	SDL	Qual.
Organic Compounds in Soil								
Total Petroleum Hydrocarbons								
TPH- Diesel Range	mg/kg	—	4.7	0.55		11	0.56	
TPH - Motor Oil Range	mg/kg	—	NA			NA		
TPH-Gasoline Range	mg/kg	—	ND	0.022		0.16	0.023	
TPH	mg/kg	500	4.7			11.16		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detection limits.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedances are shown in bold.

TABLE 2 (Cont'd)

Summary of Soil Analytical Results for Excavation Limits

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	B-5			C-1			C-3			D-1		
			Result	SDL	Qual.	Result	SDL	Qual.	Result	SDL	Qual.	Result	SDL	Qual.
Organic Compounds in Soil														
Total Petroleum Hydrocarbons														
TPH- Diesel Range	mg/kg	—	ND	0.59		ND	0.61		ND	0.62		ND	0.82	
TPH - Motor Oil Range	mg/kg	—	4.7	0.59		4.4	0.61		3.4	0.62	J	8	0.82	
TPH-Gasoline Range	mg/kg	—	ND	0.024		ND	0.025		ND	0.025		ND	0.033	
TPH	mg/kg	500	4.7			4.4			3.4			8		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detection limits.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedances are shown in bold.

TABLE 2 (Cont'd)

Summary of Soil Analytical Results for Excavation Limits

Gillham Pit #117251
Peetz, Colorado

Analysis	Units	Sample ID: COGCC Limit	D-2			D-3			AB-5			AO1			AO2		
			Result	SDL	Qual.	Result	SDL	Qual.	Result	SDL	Qual.	Result	SDL	Qual.	Result	RL	Qual.
Organic Compounds in Soil																	
Total Petroleum Hydrocarbons																	
TPH- Diesel Range	mg/kg	—	ND	0.59		ND	0.59		ND	0.64		ND	0.6		ND	0.63	
TPH - Motor Oil Range	mg/kg	—	1.7	0.59	J	0.73	0.59	J	ND	0.64		3.7	0.6	J	ND	0.63	
TPH-Gasoline Range	mg/kg	—	ND	0.023		ND	0.024		ND	0.026		ND	0.024		ND	0.025	
TPH	mg/kg	500	1.7			0.73			ND			3.7			ND		

NOTES:

1. Analytical results are summarized in this table from a laboratory analytical reports and compared to COGCC regulatory limits listed in Table 910-1.
2. The complete analytical reports are provided as an Appendix A.
3. NA = Not Available.
4. ND = Not Detected above standard detection limits.
5. SDL = Standard Detection Limit
6. Qual. = Qualifier: J = estimated value
7. — = COGCC regulatory limit not established for parameter
8. Reported concentrations or measurement above or below regulatory limits are shown in bold. Constituents or parameters with one or more limit exceedances are shown in bold.

Figures

March 8, 2011
Project No. 0104362

Environmental Resources Management Southwest, Inc.
15810 Park Ten Place, Suite 300
Houston, Texas 77084-5140
(281) 600-1000

Analytical Results from October and December Sampling Events

Appendix A

March 8, 2011
Project No. 0104362

Environmental Resources Management Southwest, Inc.
15810 Park Ten Place, Suite 300
Houston, Texas 77084-5140
(281) 600-1000

ALS Environmental

22-Oct-2010

Dennis Schilly
ERM Southwest, Inc.
15810 Park Ten Place
Suite 300
Houston, TX 77084

Tel: (713) 724-4987
Fax: (281) 600-1001

Re: Peetz, Colorado

Work Order: **1010597**

Dear Dennis,

ALS Environmental received 19 samples on 16-Oct-2010 09:10 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

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

The total number of pages in this report is 29.

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

Sincerely,

Hector Coronado

Electronically approved by: Glenda H. Ramos

Hector Coronado
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

Certificate No: TX: T104704231-10-3

ALS Environmental

Date: 22-Oct-10

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Work Order: 1010597

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1010597-01	A-1	Solid		10/14/2010 11:00	10/16/2010 09:10	☐
1010597-02	A-2	Solid		10/14/2010 12:50	10/16/2010 09:10	☐
1010597-03	A-3	Solid		10/14/2010 12:42	10/16/2010 09:10	☐
1010597-04	A-4	Solid		10/14/2010 12:36	10/16/2010 09:10	☐
1010597-05	A-5	Solid		10/14/2010 12:28	10/16/2010 09:10	☐
1010597-06	B-1	Solid		10/14/2010 11:07	10/16/2010 09:10	☐
1010597-07	B-3	Solid		10/14/2010 12:00	10/16/2010 09:10	☐
1010597-08	B-4	Solid		10/14/2010 12:09	10/16/2010 09:10	☐
1010597-09	B-5	Solid		10/14/2010 12:15	10/16/2010 09:10	☐
1010597-10	C-1	Solid		10/14/2010 11:16	10/16/2010 09:10	☐
1010597-11	C-3	Solid		10/14/2010 11:52	10/16/2010 09:10	☐
1010597-12	D-1	Solid		10/14/2010 11:26	10/16/2010 09:10	☐
1010597-13	D-2	Solid		10/14/2010 11:32	10/16/2010 09:10	☐
1010597-14	D-3	Solid		10/14/2010 11:41	10/16/2010 09:10	☐
1010597-15	AB-5	Solid		10/14/2010 12:22	10/16/2010 09:10	☐
1010597-16	AO1	Solid		10/14/2010 10:50	10/16/2010 09:10	☐
1010597-17	AO2	Solid		10/14/2010 10:30	10/16/2010 09:10	☐
1010597-18	Trip Blank 1	Water		10/14/2010	10/16/2010 09:10	☑
1010597-19	Trip Blank 2	Water		10/14/2010	10/16/2010 09:10	☑

Client:	ERM Southwest, Inc.
Project:	Peetz, Colorado
Work Order:	1010597

Case Narrative

Batch R99436, GRO: All 5035 vials were filled with plugs, making it impossible to analyze directly. Analysis performed by removing a single plug of approximately five grams.

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: A-1
Collection Date: 10/14/2010 11:00 AM

Work Order: 1010597
Lab ID: 1010597-01
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			Method: **SW8015M**		Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.55	1.9	mg/Kg-dry	1	10/18/2010 18:17
TPH (Motor Oil Range)	**0.58**	Jn	**0.55**	**3.8**	**mg/Kg-dry**	1	10/18/2010 18:17
Surr: 2-Fluorobiphenyl	*115*			*70-130*	*%REC*	1	10/18/2010 18:17
GASOLINE RANGE ORGANICS			Method: **SW8015**				Analyst: **KKP**
Gasoline Range Organics	U		0.022	0.055	mg/Kg-dry	0.992	10/21/2010 21:59
Surr: 4-Bromofluorobenzene	*111*			*70-130*	*%REC*	0.992	10/21/2010 21:59
MOISTURE			Method: **E160.3**				Analyst: **JLC**
Percent Moisture	**9.75**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: A-2
Collection Date: 10/14/2010 12:50 PM

Work Order: 1010597
Lab ID: 1010597-02
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.52	1.8	mg/Kg-dry	1	10/18/2010 18:37
TPH (Motor Oil Range)	**0.91**	Jn	**0.52**	**3.5**	**mg/Kg-dry**	1	10/18/2010 18:37
Surr: 2-Fluorobiphenyl	*103*			*70-130*	*%REC*	1	10/18/2010 18:37
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.021	0.052	mg/Kg-dry	1.002	10/21/2010 22:14
Surr: 4-Bromofluorobenzene	*106*			*70-130*	*%REC*	1.002	10/21/2010 22:14
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**3.80**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: A-3
Collection Date: 10/14/2010 12:42 PM

Work Order: 1010597
Lab ID: 1010597-03
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	**1.1**	J	**0.58**	**2.0**	**mg/Kg-dry**	1	10/18/2010 18:56
TPH (Motor Oil Range)	**4.6**	n	**0.58**	**3.9**	**mg/Kg-dry**	1	10/18/2010 18:56
Surr: 2-Fluorobiphenyl	*109*			*70-130*	*%REC*	1	10/18/2010 18:56
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.023	0.058	mg/Kg-dry	1.006	10/21/2010 22:29
Surr: 4-Bromofluorobenzene	*107*			*70-130*	*%REC*	1.006	10/21/2010 22:29
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**13.9**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: A-4
Collection Date: 10/14/2010 12:36 PM

Work Order: 1010597
Lab ID: 1010597-04
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	**27**		**0.59**	**2.0**	**mg/Kg-dry**	1	10/18/2010 19:16
TPH (Motor Oil Range)	**44**	n	**0.59**	**4.0**	**mg/Kg-dry**	1	10/18/2010 19:16
Surr: 2-Fluorobiphenyl	*101*			*70-130*	*%REC*	1	10/18/2010 19:16
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.024	0.059	mg/Kg-dry	0.996	10/21/2010 22:43
Surr: 4-Bromofluorobenzene	*104*			*70-130*	*%REC*	0.996	10/21/2010 22:43
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**15.3**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: A-5
Collection Date: 10/14/2010 12:28 PM

Work Order: 1010597
Lab ID: 1010597-05
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	**9.9**		**0.60**	**2.0**	**mg/Kg-dry**	1	10/18/2010 19:35
TPH (Motor Oil Range)	**42**	n	**0.60**	**4.0**	**mg/Kg-dry**	1	10/18/2010 19:35
Surr: 2-Fluorobiphenyl	*99.0*			*70-130*	*%REC*	1	10/18/2010 19:35
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.024	0.059	mg/Kg-dry	0.99	10/21/2010 22:58
Surr: 4-Bromofluorobenzene	*106*			*70-130*	*%REC*	0.99	10/21/2010 22:58
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**16.2**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: B-1
Collection Date: 10/14/2010 11:07 AM

Work Order: 1010597
Lab ID: 1010597-06
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.59	2.0	mg/Kg-dry	1	10/18/2010 19:54
TPH (Motor Oil Range)	**3.8**	Jn	**0.59**	**4.0**	**mg/Kg-dry**	1	10/18/2010 19:54
Surr: 2-Fluorobiphenyl	*99.6*			*70-130*	*%REC*	1	10/18/2010 19:54
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.023	0.058	mg/Kg-dry	0.984	10/21/2010 23:13
Surr: 4-Bromofluorobenzene	*107*			*70-130*	*%REC*	0.984	10/21/2010 23:13
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**15.8**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: B-3
Collection Date: 10/14/2010 12:00 PM

Work Order: 1010597
Lab ID: 1010597-07
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.60	2.0	mg/Kg-dry	1	10/18/2010 20:14
TPH (Motor Oil Range)	**3.1**	Jn	**0.60**	**4.1**	**mg/Kg-dry**	1	10/18/2010 20:14
Surr: 2-Fluorobiphenyl	*120*			*70-130*	*%REC*	1	10/18/2010 20:14
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.024	0.059	mg/Kg-dry	0.986	10/21/2010 23:28
Surr: 4-Bromofluorobenzene	*107*			*70-130*	*%REC*	0.986	10/21/2010 23:28
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**16.2**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: B-4
Collection Date: 10/14/2010 12:09 PM

Work Order: 1010597
Lab ID: 1010597-08
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	**3.3**		**0.53**	**1.8**	**mg/Kg-dry**	1	10/18/2010 20:33
TPH (Motor Oil Range)	**22**	n	**0.53**	**3.6**	**mg/Kg-dry**	1	10/18/2010 20:33
Surr: 2-Fluorobiphenyl	*114*			*70-130*	*%REC*	1	10/18/2010 20:33
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.021	0.053	mg/Kg-dry	0.998	10/21/2010 23:42
Surr: 4-Bromofluorobenzene	*110*			*70-130*	*%REC*	0.998	10/21/2010 23:42
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**6.33**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: B-5
Collection Date: 10/14/2010 12:15 PM

Work Order: 1010597
Lab ID: 1010597-09
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.59	2.0	mg/Kg-dry	1	10/18/2010 20:53
TPH (Motor Oil Range)	**4.7**	n	**0.59**	**4.0**	**mg/Kg-dry**	1	10/18/2010 20:53
Surr: 2-Fluorobiphenyl	*99.8*			*70-130*	*%REC*	1	10/18/2010 20:53
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.024	0.060	mg/Kg-dry	1.01	10/21/2010 23:57
Surr: 4-Bromofluorobenzene	*108*			*70-130*	*%REC*	1.01	10/21/2010 23:57
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**15.5**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: C-1
Collection Date: 10/14/2010 11:16 AM

Work Order: 1010597
Lab ID: 1010597-10
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.61	2.1	mg/Kg-dry	1	10/18/2010 17:39
TPH (Motor Oil Range)	**4.4**	n	**0.61**	**4.1**	**mg/Kg-dry**	1	10/18/2010 17:39
Surr: 2-Fluorobiphenyl	*71.9*			*70-130*	*%REC*	1	10/18/2010 17:39
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.025	0.061	mg/Kg-dry	1.008	10/22/2010 00:41
Surr: 4-Bromofluorobenzene	*106*			*70-130*	*%REC*	1.008	10/22/2010 00:41
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**18.0**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: C-3
Collection Date: 10/14/2010 11:52 AM

Work Order: 1010597
Lab ID: 1010597-11
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.62	2.1	mg/Kg-dry	1	10/18/2010 17:58
TPH (Motor Oil Range)	**3.4**	Jn	**0.62**	**4.2**	**mg/Kg-dry**	1	10/18/2010 17:58
Surr: 2-Fluorobiphenyl	*70.5*			*70-130*	*%REC*	1	10/18/2010 17:58
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.025	0.062	mg/Kg-dry	0.998	10/22/2010 00:56
Surr: 4-Bromofluorobenzene	*107*			*70-130*	*%REC*	0.998	10/22/2010 00:56
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**19.2**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: D-1
Collection Date: 10/14/2010 11:26 AM

Work Order: 1010597
Lab ID: 1010597-12
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.82	2.8	mg/Kg-dry	1	10/18/2010 18:17
TPH (Motor Oil Range)	**8.0**	n	**0.82**	**5.6**	**mg/Kg-dry**	1	10/18/2010 18:17
Surr: 2-Fluorobiphenyl	*72.7*			*70-130*	*%REC*	1	10/18/2010 18:17
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.033	0.081	mg/Kg-dry	0.99	10/22/2010 01:11
Surr: 4-Bromofluorobenzene	*107*			*70-130*	*%REC*	0.99	10/22/2010 01:11
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**39.2**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: D-2
Collection Date: 10/14/2010 11:32 AM

Work Order: 1010597
Lab ID: 1010597-13
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.59	2.0	mg/Kg-dry	1	10/18/2010 18:37
TPH (Motor Oil Range)	**1.7**	Jn	**0.59**	**4.0**	**mg/Kg-dry**	1	10/18/2010 18:37
Surr: 2-Fluorobiphenyl	*70.6*			*70-130*	*%REC*	1	10/18/2010 18:37
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.023	0.058	mg/Kg-dry	0.986	10/22/2010 01:25
Surr: 4-Bromofluorobenzene	*112*			*70-130*	*%REC*	0.986	10/22/2010 01:25
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**15.6**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: D-3
Collection Date: 10/14/2010 11:41 AM

Work Order: 1010597
Lab ID: 1010597-14
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.59	2.0	mg/Kg-dry	1	10/18/2010 18:56
TPH (Motor Oil Range)	**0.73**	Jn	**0.59**	**4.0**	**mg/Kg-dry**	1	10/18/2010 18:56
Surr: 2-Fluorobiphenyl	*72.2*			*70-130*	*%REC*	1	10/18/2010 18:56
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.024	0.060	mg/Kg-dry	1.008	10/22/2010 01:40
Surr: 4-Bromofluorobenzene	*106*			*70-130*	*%REC*	1.008	10/22/2010 01:40
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**15.6**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: AB-5
Collection Date: 10/14/2010 12:22 PM

Work Order: 1010597
Lab ID: 1010597-15
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.64	2.2	mg/Kg-dry	1	10/18/2010 19:16
TPH (Motor Oil Range)	U	n	0.64	4.4	mg/Kg-dry	1	10/18/2010 19:16
Surr: 2-Fluorobiphenyl	*78.7*			*70-130*	*%REC*	1	10/18/2010 19:16
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.026	0.064	mg/Kg-dry	0.992	10/22/2010 01:55
Surr: 4-Bromofluorobenzene	*105*			*70-130*	*%REC*	0.992	10/22/2010 01:55
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**22.6**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: AO1
Collection Date: 10/14/2010 10:50 AM

Work Order: 1010597
Lab ID: 1010597-16
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.60	2.0	mg/Kg-dry	1	10/18/2010 19:35
TPH (Motor Oil Range)	**3.7**	Jn	**0.60**	**4.1**	**mg/Kg-dry**	1	10/18/2010 19:35
Surr: 2-Fluorobiphenyl	*70.8*			*70-130*	*%REC*	1	10/18/2010 19:35
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.024	0.059	mg/Kg-dry	0.984	10/22/2010 02:10
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	0.984	10/22/2010 02:10
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**16.3**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: *22-Oct-10*

Client: ERM Southwest, Inc.
Project: Peetz, Colorado
Sample ID: AO2
Collection Date: 10/14/2010 10:30 AM

Work Order: 1010597
Lab ID: 1010597-17
Matrix: SOLID

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 10/18/10		Analyst: **RPM**
TPH (Diesel Range)	U		0.63	2.1	mg/Kg-dry	1	10/18/2010 19:54
TPH (Motor Oil Range)	U	n	0.63	4.3	mg/Kg-dry	1	10/18/2010 19:54
Surr: 2-Fluorobiphenyl	*70.4*			*70-130*	*%REC*	1	10/18/2010 19:54
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	U		0.025	0.063	mg/Kg-dry	0.996	10/22/2010 02:24
Surr: 4-Bromofluorobenzene	*107*			*70-130*	*%REC*	0.996	10/22/2010 02:24
MOISTURE		Method: **E160.3**					Analyst: **JLC**
Percent Moisture	**20.9**	n	**0.010**	**0.0100**	**wt%**	1	10/21/2010 10:00

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

ALS Environmental

Date: 22-Oct-10

Client: ERM Southwest, Inc.
Work Order: 1010597
Project: Peetz, Colorado

QC BATCH REPORT

Batch ID: **47051** Instrument ID **FID-7** Method: **SW8015M**

MBLK Sample ID: **FBLKS1-101018-47051** Units: **mg/Kg** Analysis Date: **10/18/2010 05:39 PM**

Client ID: Run ID: **FID-7_101018A** SeqNo: **2139705** Prep Date: **10/18/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	U	1.7								
TPH (Motor Oil Range)	U	3.4								
Surr: 2-Fluorobiphenyl	*3.901*	0.10	*3.33*	0	*117*	*70-130*	0			

LCS Sample ID: **FLCSS1-101018-47051** Units: **mg/Kg** Analysis Date: **10/18/2010 05:58 PM**

Client ID: Run ID: **FID-7_101018A** SeqNo: **2139706** Prep Date: **10/18/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	38.94	1.7	33.33	0	117	70-130	0			
TPH (Motor Oil Range)	30.12	3.4	33.33	0	90.4	70-130	0			
Surr: 2-Fluorobiphenyl	*4.197*	0.10	*3.33*	0	*126*	*70-130*	0			

MS Sample ID: **1010597-17BMS** Units: **mg/Kg** Analysis Date: **10/18/2010 08:14 PM**

Client ID: **AO2** Run ID: **FID-7_101018A** SeqNo: **2139743** Prep Date: **10/18/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	30.08	1.7	33.27	0.06954	90.2	70-130	0			
TPH (Motor Oil Range)	26.93	3.4	33.27	0.2986	80	70-130	0			
Surr: 2-Fluorobiphenyl	*2.4*	0.10	*3.324*	0	*72.2*	*70-130*	0			

MSD Sample ID: **1010597-17BMSD** Units: **mg/Kg** Analysis Date: **10/18/2010 08:33 PM**

Client ID: **AO2** Run ID: **FID-7_101018A** SeqNo: **2139744** Prep Date: **10/18/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	28.46	1.7	33.31	0.06954	85.2	70-130	30.08	5.51	30	
TPH (Motor Oil Range)	25.72	3.4	33.31	0.2986	76.3	70-130	26.93	4.62	30	
Surr: 2-Fluorobiphenyl	*2.353*	0.10	*3.328*	0	*70.7*	*70-130*	2.4	*2.01*	*30*	

The following samples were analyzed in this batch:

1010597-01B	1010597-02B	1010597-03B
1010597-04B	1010597-05B	1010597-06B
1010597-07B	1010597-08B	1010597-09B
1010597-10B	1010597-11B	1010597-12B
1010597-13B	1010597-14B	1010597-15B
1010597-16B	1010597-17B	

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

Client: ERM Southwest, Inc.
Work Order: 1010597
Project: Peetz, Colorado

QC BATCH REPORT

Batch ID: **R99436** Instrument ID **FID-9** Method: **SW8015**

MBLK Sample ID: **GBLKS-102110-R99436** Units: **mg/Kg** Analysis Date: **10/21/2010 08:15 PM**
Client ID: Run ID: **FID-9_101021A** SeqNo: **2141059** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	U	0.050								
Surr: 4-Bromofluorobenzene	*0.09088*	0.0050	*0.1*	0	*90.9*	*70-130*	0			

LCS Sample ID: **GLCSS-102110-R99436** Units: **mg/Kg** Analysis Date: **10/21/2010 07:45 PM**
Client ID: Run ID: **FID-9_101021A** SeqNo: **2141057** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.103	0.050	1	0	110	70-130	0			
Surr: 4-Bromofluorobenzene	*0.08178*	0.0050	*0.1*	0	*81.8*	*70-130*	0			

LCSD Sample ID: **GLCSDS-102110-R99436** Units: **mg/Kg** Analysis Date: **10/21/2010 08:00 PM**
Client ID: Run ID: **FID-9_101021A** SeqNo: **2141058** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.126	0.050	1	0	113	70-130	1.103	2.12	30	
Surr: 4-Bromofluorobenzene	*0.0954*	0.0050	*0.1*	0	*95.4*	*70-130*	0.08178	*15.4*	*30*	

MS Sample ID: **1010445-01AMS** Units: **mg/Kg** Analysis Date: **10/21/2010 08:59 PM**
Client ID: Run ID: **FID-9_101021A** SeqNo: **2141061** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.7207	0.050	1	0	72.1	70-130	0			
Surr: 4-Bromofluorobenzene	*0.1065*	0.0050	*0.1*	0	*107*	*70-130*	0			

MSD Sample ID: **1010445-01AMSD** Units: **mg/Kg** Analysis Date: **10/21/2010 09:14 PM**
Client ID: Run ID: **FID-9_101021A** SeqNo: **2141062** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.7043	0.050	1	0	70.4	70-130	0.7207	2.3	30	
Surr: 4-Bromofluorobenzene	*0.1114*	0.0050	*0.1*	0	*111*	*70-130*	0.1065	*4.5*	*30*	

The following samples were analyzed in this batch:

1010597-01A	1010597-02A	1010597-03A
1010597-04A	1010597-05A	1010597-06A
1010597-07A	1010597-08A	1010597-09A
1010597-10A	1010597-11A	1010597-12A
1010597-13A	1010597-14A	1010597-15A
1010597-16A	1010597-17A	

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

Client: ERM Southwest, Inc.
Work Order: 1010597
Project: Peetz, Colorado

QC BATCH REPORT

Batch ID: **R99383** Instrument ID **Balance1** Method: **E160.3**

DUP Sample ID: **1010597-08ADUP** Units: **wt%** Analysis Date: **10/21/2010 10:00 A**

Client ID: **B-4** Run ID: **BALANCE1_101021F** SeqNo: **2140323** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	6.733	0.010	0	0	0	0-0	6.334	6.11	20	

The following samples were analyzed in this batch:

1010597-01A	1010597-02A	1010597-03A
1010597-04A	1010597-05A	1010597-06A
1010597-07A	1010597-08A	

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

Client: ERM Southwest, Inc.
Work Order: 1010597
Project: Peetz, Colorado

QC BATCH REPORT

Batch ID: **R99385** Instrument ID **Balance1** Method: **E160.3**

DUP Sample ID: **1010643-14BDUP** Units: **wt%** Analysis Date: **10/21/2010 10:00 A**

Client ID: Run ID: **BALANCE1_101021G** SeqNo: **2140356** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	14.87	0.010	0	0	0	0-0	16.58	10.9	20	

The following samples were analyzed in this batch:

1010597-09A	1010597-10A	1010597-11A
1010597-12A	1010597-13A	1010597-14A
1010597-15A	1010597-16A	1010597-17A

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

ALS Environmental

Date: 22-Oct-10

Client:	ERM Southwest, Inc.
Project:	Peetz, Colorado
WorkOrder:	**1010597**

QUALIFIERS, ACRONYMS, UNITS

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

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/Kg-dry	Milligrams per Kilogram - Dry weight corrected
wt%	

ALS Laboratory Group
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Chain of Custody Form

ALS Laboratory Group
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

ALS Project Manager: | ALS Work Order #: 1010597

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	0104362	Project Name	Peetz, Colorado	A	VOC (8260) TCL
Work Order	0104362	Project Number	0104362	B	SVOC (8270) Select
Company Name	ERM Southwest, Inc.	Bill To Company	ERM Southwest, Inc.	C	GRO (8015M)
Send Report To	Dennis Schilly	Invoice Attn	Dennis Schilly	D	DRO (8015M)
Address	15810 Park Ten Place Suite 300	Address	15810 Park Ten Place Suite 300	E	Total Metals (6020/7000) RCRA 8 + Sb, Be, Ni
				F	RCI Profile
City/State/Zip	Houston, TX 77084	City/State/Zip	Houston, TX 77084	G	pH
Phone	(281) 600-1000	Phone	(281) 600-1000	H	
Fax	(281) 600-1001	Fax	(281) 600-1001	I	
e-Mail Address	dennis.schilly@erm.com	e-Mail Address	dennis.schilly@erm.com	J	

No.	Sample Description	Date	Time	Matrix	# Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	A-1	10/14/10	11:00	Solid	7	5			X	X							
2	A-~~DS~~ 2	10/14/10	12:50	Solid	7	5			X	X							
3	A-~~DS~~ 3	10/14/10	12:42	Solid	7	5			X	X							
4	A-~~DS~~ 4	10/14/10	12:36	Solid	7	5			X	X							
5	A-~~DS~~ 5	10/14/10	12:28	Solid	7	5			X	X							
6	B-1	10/14/10	11:07	Solid	7	5			X	X							
7	B-~~DS~~ 3	10/14/10	12:00	Solid	7	5			X	X							
8	B-~~DS~~ 4	10/14/10	1209	Solid	7	5			X	X							
9	B-~~DS~~ 5	10/14/10	1215	Solid	7	5			X	X							
10	C-1	10/14/10	11:16	Solid	7	5			X	X							

Sampler(s) Please Print & Sign: D. Schilly / G. Towne

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box): ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
	10/15/10	1000Am	FEDEX	10 Day TAT. 7 = Methanol
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID: / Cooler Temp.:
	10/16/10	0910	RN ALS	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

☒ ALS Laboratory Group
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
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Chain of Custody Form

☐ ALS Laboratory Group
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

ALS Project Manager: | ALS Work Order #: 1010597

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	0104362	Project Name	Peetz, Colorado	A	VOC (8260) TCL
Work Order	0104362	Project Number	0104362	B	SVOC (8270) Select
Company Name	ERM Southwest, Inc.	Bill To Company	ERM Southwest, Inc.	C	GRO (8015M)
Send Report To	Dennis Schilly	Invoice Attn	Dennis Schilly	D	DRO (8015M)
Address	15810 Park Ten Place Suite 300	Address	15810 Park Ten Place Suite 300	E	Total Metals (6020/7000) RCRA 8 + Sb, Be, Ni
				F	RCI Profile
City/State/Zip	Houston, TX 77084	City/State/Zip	Houston, TX 77084	G	pH
Phone	(281) 600-1000	Phone	(281) 600-1000	H	
Fax	(281) 600-1001	Fax	(281) 600-1001	I	
e-Mail Address	dennis.schilly@erm.com	e-Mail Address	dennis.schilly@erm.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	C-A~~S~~3	10/14/10	11:52	Solid	7	5			X	X							
2	D-1	10/14/10	11:26	Solid	7	5			X	X							
3	D-2	10/14/10	11:32	Solid	7	5			X	X							
4	D-3	10/14/10	11:41	Solid	7	5			X	X							
5	AB-~~A~~5	10/14/10	12:22	Solid	7	5			X	X							
6	A01	10/14/10	1050	Solid	7	5			X	X							
7	A02	10/14/10	1030	Solid	7	5			X	X							
8																	
9																	
10																	

Sampler(s) Please Print & Sign: D. Schilly / G. Towne

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☑ Std. 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
	10/15/10	1000Am	FED EX
Relinquished by:	Date:	Time:	Received by (Laboratory):
	10/16/10	0910	RN ALS
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: 10 Day TAT. 7 = Methanol

Cooler ID | Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Environmental

Sample Receipt Checklist

Client Name: **ERMSW-HOU** Date/Time Received: **16-Oct-10 09:10**

Work Order: **1010597** Received by: **LOT**

Checklist completed by Robert D. Harris eSignature 16-Oct-10 Date Reviewed by: Hector Coronado eSignature 18-Oct-10 Date

Matrices: solids
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.1c,3.8c,4.3c	002	
Cooler(s)/Kit(s):	2514,2079,9042		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes: Trip blanks not on COC; logged in without analysis.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

SRC Page 1 of 1

2514

1010547

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL

Seal Broken By:

Date:

2079

9042.

10/15/10

9042

to 10/15/10 FedEx Tracking Number 873161768935

nder's me GABE TOUMA Phone 7204682420

Company ERM

Address 6455 Yosemite st, ste 900

Dept/Floor/Suite/Room

Greenwood Village State CO ZIP 80111

ur Internal Billing Reference #0104362

to 10/15/10 FedEx Tracking Number 873161768924

nder's me GABE TOUMA Phone 303 741-5050

2514

Company ERM WEST, INC.

Address 6455 So. YOSEMITE ST, STE. 900

Dept/Floor/Suite/Room

GREENWOOD VILLAGE State CO ZIP 80111

ur Internal Billing Reference #0104362

to 10/15/10 FedEx Tracking Number 873161768913

nder's me GABE TOUMA Phone 303 741-5050

2079

Company ERM WEST, INC.

Address 6455 So. YOSEMITE ST, STE. 900

Dept/Floor/Suite/Room

GREENWOOD VILLAGE State CO ZIP 80111

ur Internal Billing Reference #0104362

ALS Environmental

14-Dec-2010

Dennis Schilly
ERM Southwest, Inc.
15810 Park Ten Place
Suite 300
Houston, TX 77084

Tel: (713) 724-4987
Fax: (281) 600-1001

Re: Peetz,Colorado - Gillham Pit Work Order: **1012353**

Dear Dennis,

ALS Environmental received 6 samples on 10-Dec-2010 09:25 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

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

The total number of pages in this report is 15.

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

Sincerely,

Electronically approved by: Mary K. Knowles

Hector Coronado
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac
Certificate No: TX: T104704231-10-3

ALS Environmental

Date: 14-Dec-10

Client: ERM Southwest, Inc.
Project: Peetz,Colorado - Gillham Pit
Work Order: 1012353

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1012353-01	GP-120810-1	Soil		12/8/2010 12:50	12/10/2010 09:25	☐
1012353-02	GP-120810-2	Soil		12/8/2010 13:00	12/10/2010 09:25	☐
1012353-03	GP-120810-3	Soil		12/8/2010 13:10	12/10/2010 09:25	☐
1012353-04	GP-120810-4	Soil		12/8/2010 13:45	12/10/2010 09:25	☐
1012353-05	GP-120810-5	Soil		12/8/2010 14:10	12/10/2010 09:25	☐
1012353-06	GP-120810-6	Soil		12/9/2010 07:50	12/10/2010 09:25	☐

ALS Environmental

Date: *14-Dec-10*

Client: ERM Southwest, Inc.
Project: Peetz,Colorado - Gillham Pit
Sample ID: GP-120810-1
Collection Date: 12/8/2010 12:50 PM

Work Order: 1012353
Lab ID: 1012353-01
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			Method: **SW8015M**		Prep: SW3541 / 12/13/10		Analyst: **SE**
TPH (Diesel Range)	U		0.58	2.0	mg/Kg-dry	1	12/13/2010 16:33
Surr: 2-Fluorobiphenyl	*70.8*			*70-130*	*%REC*	1	12/13/2010 16:33
GASOLINE RANGE ORGANICS			Method: **SW8015**				Analyst: **KKP**
Gasoline Range Organics	U		0.023	0.058	mg/Kg-dry	1	12/13/2010 13:48
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	12/13/2010 13:48
MOISTURE			Method: **E160.3**				Analyst: **TDW**
Percent Moisture	**14.1**	n	**0.010**	**0.0100**	**wt%**	1	12/12/2010 14:00

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

ALS Environmental

Date: *14-Dec-10*

Client: ERM Southwest, Inc.
Project: Peetz,Colorado - Gillham Pit
Sample ID: GP-120810-2
Collection Date: 12/8/2010 01:00 PM

Work Order: 1012353
Lab ID: 1012353-02
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			Method: **SW8015M**		Prep. SW3541 / 12/13/10		Analyst: **SE**
TPH (Diesel Range)	U		0.55	1.9	mg/Kg-dry	1	12/13/2010 14:07
Surr: 2-Fluorobiphenyl	*74.3*			*70-130*	*%REC*	1	12/13/2010 14:07
GASOLINE RANGE ORGANICS			Method: **SW8015**				Analyst: **KKP**
Gasoline Range Organics	U		0.022	0.055	mg/Kg-dry	1	12/13/2010 14:03
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	1	12/13/2010 14:03
MOISTURE			Method: **E160.3**				Analyst: **TDW**
Percent Moisture	**8.38**	n	**0.010**	**0.0100**	**wt%**	1	12/12/2010 14:00

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

ALS Environmental

Date: *14-Dec-10*

Client: ERM Southwest, Inc.
Project: Peetz,Colorado - Gillham Pit
Sample ID: GP-120810-3
Collection Date: 12/8/2010 01:10 PM

Work Order: 1012353
Lab ID: 1012353-03
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			Method: **SW8015M**		Prep: SW3541 / 12/13/10		Analyst: **SE**
TPH (Diesel Range)	U		0.56	1.9	mg/Kg-dry	1	12/13/2010 14:26
Surr: 2-Fluorobiphenyl	*75.6*			*70-130*	*%REC*	1	12/13/2010 14:26
GASOLINE RANGE ORGANICS			Method: **SW8015**				Analyst: **KKP**
Gasoline Range Organics	U		0.022	0.056	mg/Kg-dry	1	12/13/2010 14:18
Surr: 4-Bromofluorobenzene	*105*			*70-130*	*%REC*	1	12/13/2010 14:18
MOISTURE			Method: **E160.3**				Analyst: **TDW**
Percent Moisture	**10.9**	n	**0.010**	**0.0100**	**wt%**	1	12/12/2010 14:00

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

ALS Environmental

Date: *14-Dec-10*

Client: ERM Southwest, Inc.
Project: Peetz,Colorado - Gillham Pit
Sample ID: GP-120810-4
Collection Date: 12/8/2010 01:45 PM

Work Order: 1012353
Lab ID: 1012353-04
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO		Method: **SW8015M**			Prep: SW3541 / 12/13/10		Analyst: **SE**
TPH (Diesel Range)	**8.3**		**0.55**	**1.9**	**mg/Kg-dry**	1	12/13/2010 14:46
Surr: 2-Fluorobiphenyl	*76.7*			*70-130*	*%REC*	1	12/13/2010 14:46
GASOLINE RANGE ORGANICS		Method: **SW8015**					Analyst: **KKP**
Gasoline Range Organics	**0.082**		**0.022**	**0.055**	**mg/Kg-dry**	1	12/13/2010 14:33
Surr: 4-Bromofluorobenzene	*106*			*70-130*	*%REC*	1	12/13/2010 14:33
MOISTURE		Method: **E160.3**					Analyst: **TDW**
Percent Moisture	**8.47**	n	**0.010**	**0.0100**	**wt%**	1	12/12/2010 14:00

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

ALS Environmental

Date: *14-Dec-10*

Client: ERM Southwest, Inc.
Project: Peetz,Colorado - Gillham Pit
Sample ID: GP-120810-5
Collection Date: 12/8/2010 02:10 PM

Work Order: 1012353
Lab ID: 1012353-05
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			Method: **SW8015M**		Prep: SW3541 / 12/13/10		Analyst: **SE**
TPH (Diesel Range)	**4.7**		**0.55**	**1.9**	**mg/Kg-dry**	1	12/13/2010 15:05
Surr: 2-Fluorobiphenyl	*75.7*			*70-130*	*%REC*	1	12/13/2010 15:05
GASOLINE RANGE ORGANICS			Method: **SW8015**				Analyst: **KKP**
Gasoline Range Organics	U		0.022	0.055	mg/Kg-dry	1	12/13/2010 14:48
Surr: 4-Bromofluorobenzene	*99.2*			*70-130*	*%REC*	1	12/13/2010 14:48
MOISTURE			Method: **E160.3**				Analyst: **TDW**
Percent Moisture	**8.51**	*n*	**0.010**	**0.0100**	**wt%**	1	12/12/2010 14:00

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

ALS Environmental

Date: *14-Dec-10*

Client:	ERM Southwest, Inc.		
Project:	Peetz,Colorado - Gillham Pit	**Work Order:**	1012353
Sample ID:	GP-120810-6	**Lab ID:**	1012353-06
Collection Date:	12/9/2010 07:50 AM	**Matrix:**	SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			Method: **SW8015M**		Prep: SW3541 / 12/13/10		Analyst: **SE**
TPH (Diesel Range)	11		0.56	1.9	mg/Kg-dry	1	12/13/2010 15:54
Surr: 2-Fluorobiphenyl	*86.4*			*70-130*	*%REC*	1	12/13/2010 15:54
GASOLINE RANGE ORGANICS			Method: **SW8015**				Analyst: **KKP**
Gasoline Range Organics	0.16		0.023	0.056	mg/Kg-dry	1	12/13/2010 15:49
Surr: 4-Bromofluorobenzene	*109*			*70-130*	*%REC*	1	12/13/2010 15:49
MOISTURE			Method: **E160.3**				Analyst: **TDW**
Percent Moisture	11.4	n	0.010	0.0100	wt%	1	12/12/2010 14:00

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

ALS Environmental

Date: 14-Dec-10

Client: ERM Southwest, Inc.
Work Order: 1012353
Project: Peetz,Colorado - Gillham Pit

QC BATCH REPORT

Batch ID: **48603** Instrument ID **FID-7** Method: **SW8015M**

MBLK Sample ID: **FBLKS1-101213-48603** Units: **mg/Kg** Analysis Date: **12/13/2010 02:07 PM**

Client ID: Run ID: **FID-7_101213A** SeqNo: **2209843** Prep Date: **12/13/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	U	1.7								
Surr: 2-Fluorobiphenyl	*3.099*	0.10	*3.33*	0	*93.1*	*70-130*	0			

LCS Sample ID: **FLCSS1-101213-48603** Units: **mg/Kg** Analysis Date: **12/13/2010 02:26 PM**

Client ID: Run ID: **FID-7_101213A** SeqNo: **2209844** Prep Date: **12/13/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	36.96	1.7	33.33	0	111	70-130	0			
Surr: 2-Fluorobiphenyl	*3.797*	0.10	*3.33*	0	*114*	*70-130*	0			

MS Sample ID: **1012353-01BMS** Units: **mg/Kg** Analysis Date: **12/13/2010 03:05 PM**

Client ID: **GP-120810-1** Run ID: **FID-7_101213A** SeqNo: **2209845** Prep Date: **12/13/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	27.62	1.7	33.32	0.1607	82.4	70-130	0			
Surr: 2-Fluorobiphenyl	*2.459*	0.10	*3.329*	0	*73.9*	*70-130*	0			

MSD Sample ID: **1012353-01BMSD** Units: **mg/Kg** Analysis Date: **12/13/2010 03:54 PM**

Client ID: **GP-120810-1** Run ID: **FID-7_101213A** SeqNo: **2209846** Prep Date: **12/13/2010** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	28.23	1.7	33.23	0.1607	84.5	70-130	27.62	2.16	30	
Surr: 2-Fluorobiphenyl	*2.74*	0.10	*3.32*	0	*82.5*	*70-130*	2.459	*10.8*	*30*	

The following samples were analyzed in this batch: 1012353-01B, 1012353-02B, 1012353-03B, 1012353-04B, 1012353-05B, 1012353-06B

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

Client: ERM Southwest, Inc.
Work Order: 1012353
Project: Peetz,Colorado - Gillham Pit

QC BATCH REPORT

Batch ID: **R102398** Instrument ID **FID-9** Method: **SW8015**

MBLK Sample ID: **GBLKS-101213-R102398** Units: **mg/Kg** Analysis Date: **12/13/2010 01:33 PM**
Client ID: Run ID: **FID-9_101213A** SeqNo: **2209645** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	U	0.050								
Surr: 4-Bromofluorobenzene	*0.08652*	0.0050	*0.1*	0	*86.5*	*70-130*	0			

LCS Sample ID: **GLCSS-101213-R102398** Units: **mg/Kg** Analysis Date: **12/13/2010 01:03 PM**
Client ID: Run ID: **FID-9_101213A** SeqNo: **2209642** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.024	0.050	1	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	*0.08984*	0.0050	*0.1*	0	*89.8*	*70-130*	0			

LCSD Sample ID: **GLCSDS-101213-R102398** Units: **mg/Kg** Analysis Date: **12/13/2010 01:18 PM**
Client ID: Run ID: **FID-9_101213A** SeqNo: **2209643** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.069	0.050	1	0	107	70-130	1.024	4.3	30	
Surr: 4-Bromofluorobenzene	*0.09337*	0.0050	*0.1*	0	*93.4*	*70-130*	0.08984	*3.85*	*30*	

MS Sample ID: **1012353-05AMS** Units: **mg/Kg** Analysis Date: **12/13/2010 03:03 PM**
Client ID: **GP-120810-5** Run ID: **FID-9_101213A** SeqNo: **2209651** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.064	0.050	1	0	106	70-130	0			
Surr: 4-Bromofluorobenzene	*0.1022*	0.0050	*0.1*	0	*102*	*70-130*	0			

MSD Sample ID: **1012353-05AMSD** Units: **mg/Kg** Analysis Date: **12/13/2010 03:18 PM**
Client ID: **GP-120810-5** Run ID: **FID-9_101213A** SeqNo: **2209652** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9565	0.050	1	0	95.7	70-130	1.064	10.6	30	
Surr: 4-Bromofluorobenzene	*0.09863*	0.0050	*0.1*	0	*98.6*	*70-130*	0.1022	*3.58*	*30*	

The following samples were analyzed in this batch: 1012353-01A, 1012353-02A, 1012353-03A, 1012353-04A, 1012353-05A, 1012353-06A

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

Client: ERM Southwest, Inc.
Work Order: 1012353
Project: Peetz,Colorado - Gillham Pit

QC BATCH REPORT

Batch ID: **R102384** Instrument ID **Balance1** Method: **E160.3**

DUP Sample ID: **1012353-06BDUP** Units: **wt%** Analysis Date: **12/12/2010 02:00 PM**

Client ID: **GP-120810-6** Run ID: **BALANCE1_101212F** SeqNo: **2209375** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	11.27	0.010	0	0	0	0-0	11.41	1.21	20	

The following samples were analyzed in this batch:

1012353-01B	1012353-02B	1012353-03B
1012353-04B	1012353-05B	1012353-06B

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

ALS Environmental

Date: 14-Dec-10

Client:	ERM Southwest, Inc.
Project:	Peetz,Colorado - Gillham Pit
WorkOrder:	**1012353**

QUALIFIERS, ACRONYMS, UNITS

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

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/Kg-dry	Milligrams per Kilogram - Dry weight corrected
wt%	

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Chain of Custody Form

Page 1 of 1

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Holland, MI 49424-9263
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Fax: +1 616 399 6185

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ALS Project Manager: | ALS Work Order #: 10-2353

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order:		Project Name:	Peetz, Colorado / Gillham	A	VOC (8260) TCL
Work Order:		Project Number:	0104362, Gillham, Pit	B	SVOC (8270) Select
Company Name:	ERM Southwest, Inc.	Bill to Company:	ERM Southwest, Inc.	C	GRO (8015M)
Send Report To:	Dennis Schilly	Invoice Attn:	Dennis Schilly	D	DRO (8015M)
Address:	15810 Park Ten Place Suite 300	Address:	15810 Park Ten Place Suite 300	E	Total Metals (6020/7000) RCRA 8 + Sb, Be, Ni
City/State/Zip:	Houston, TX 77084	City/State/Zip:	Houston, TX 77084	F	RCI Profile
Phone:	(281) 600-1000	Phone:	(281) 600-1000	G	pH
Fax:	(281) 600-1001	Fax:	(281) 600-1001	H	
e-Mail Address:		e-Mail Address:		I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	GP-120810-1	12/8/10	12:50	Soil	Ice	5			X	X							
2	-2		13:00														
3	-3		13:10														
4	-4		13:45														
5	-5		14:10														
6	GP-120910-6	12/9/10	7:50						X	X							
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: GABE TOUMA

Shipment Method: Fed Ex overnight

Required Turnaround Time: (Check Box) ☐ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ Other ☑ 24 Hour

Results Due Date:

Relinquished by: GABE TOUMA — Date: 12/9/10 — Time: 16:30 — Received by: FED EX

Relinquished by: — Date: 12/10/10 — Time: 0925 — Received by (Laboratory): RN ACS

Logged by (Laboratory): — Date: — Time: — Checked by (Laboratory):

Notes: 10 Day TAT.

Cooler ID: | Cooler Temp:

QC Package: (Check One Box Below)
☑ Level II Std QC
☐ Level III Std QC/Raw Data
☐ Level IV SW846/CLP
☐ Other / EDD _____
☐ TRRP Checklist
☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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ALS Environmental

Sample Receipt Checklist

Client Name: **ERMSW-HOU** Date/Time Received: **10-Dec-10 09:25**

Work Order: **1012353** Received by: **LOT**

Checklist completed by DaidHigbee eSignature 10-Dec-10 Date Reviewed by: HebCamb eSignature 11-Dec-10 Date

Matrices: soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.2c	002	
Cooler(s)/Kit(s):	N/A		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

SRC Page 1 of 1

1012353

12/9/10

ZN
12/10/10

te 12/8/10	FedEx Tracking Number	873161768946	
nder's me Gabe Towan		Phone 720 468 2410	
Company ERM			
Address 6455 S yosemite st, ste 900			Dept./Floor/Suite/Room
Greenwood village	State CO	ZIP 80111	
ur Internal Billing Reference			