NEPA COMPLIANCE SURVEY

304

Project Information			
Project Title:	Hyperspectral Survey	**Date:**	7.23.2010
DOE Code:	6730.020.61031	**Contractor Code:**	8067-523
Project Lead:	V.Stamp		

Project Overview

1. Brief project description [include anything that could impact the environment]
2. Legal location
3. Duration of the project
4. Major equipment to be used

SIMULATED

Partner has contracted with an aviation provider to fly two optical instruments over NPR-3, to detect natural gas leaks of varying rates and liquid hydrocarbon "spills" created using two types of NPR-3 crude oil, unleaded gasoline and diesel. Two leak sites will be operated with commercially provided gas cylinders at flow rates of 20 scf/hr and 70 scf/hr. The other leak sites will use NPR-3 produced gas at varying rates.

Wells and field locations to be used include: Previously-constructed gas leak sites: 1, 2c, 2d ,4 and 5; Gas plant, wells 25-Stx-23, 37-MX-10, 85-AX-33, 27-AX-34, 44-MX-10, 401-a-10, 33-MX-10, and 76-MX-3.

Roughly 4 days of field prep, and 2-3 days of flying contracted by partner over controlled gas leaks, manufactured "spills" and various geologic features of NPR-3.

Forklift, flat bed truck, Bobcat, SG5 building for project storage.

The table below is to be completed by the Project Lead and reviewed by the Environmental Specialist and the DOE NEPA Compliance Officer. NOTE: If Change of Scope occurs, Project Lead must submit a new NEPA Compliance Survey and contact the Technical Assurance Department.

	Impacts Anticipated?			If YES, then complete below
Water Quality	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Does the proposed project present potential for impacts on water resources or water quality?	☐	x	☐	
Does the project affect surface water quantity or quality under both normal operations and accident conditions?	☐	x	☐	
Does the proposed project affect groundwater quantity or quality under both normal operations and accident conditions?	☐	x	☐	
Will the project area include "Waters of the State?"	☐	x	☐	
Will the project area require a Corps of Engineers permit?	☐	x	☐	

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	Impacts Anticipated?			If YES, then complete below.
Geology & Soils	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Does the proposed project present potential for impacts related to geology or soils?	x	☐	☐	Excess soils/substrates from spill bin construction will be moved to berm area in S. Composting facility. No other soil /geology impacts.
Does the proposed project alter, excavate or otherwise disturb land area consistent with other land use and habitat area?	☐	x	☐	No excavation or surface alteration.
3Is the proposed project likely to impact local seismicity?	☐	x	☐	NA
If the project involved disturbance of surface soils, are erosion and storm water control measures addressed?	☐	☐	x	NA
Air Quality	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Does the proposed action present potential for impacts on ambient air quality under both normal and accident conditions?	☐	x	☐	Gas emissions from planned leak sites will not significantly impact air quality.
Are potential emissions (gases and/or airborne particulates including dust) outside of the normal scope for oil field operations?	☐	x	☐	
Does the project present risk to human health and the environment from exposure to radiation and hazardous chemicals in emissions?	☐	x	☐	
Is the project subject to New Source Performance Standards?	☐	x	☐	
Is the project subject to National Emissions Standards for Hazardous Air Pollutants?	☐	x	☐	
Is the project subject to emissions limitations in an Air Quality Control Region?	☐	x	☐	

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	Impacts Anticipated?			If YES, then complete below.
Wildlife and Habitat	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Does the proposed action present potential for impacts on wildlife or habitat?	☐	x	☐	
Does the project impact state or federally listed threatened and endangered species?	☐	x	☐	
Human Health Effects	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Does the proposed project present potential for effects on human health? **e.g.: Hanta virus, radiological exposure, or chemical exposure (must provide MSDS)**	☐	x	☐	
Transportation	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Does the proposed project involve transportation of radiological sources or hazardous materials (including explosives)?	x	☐	☐	Created "spill" bins will include 3 bins containing approximately 15 gals each of unleaded gasoline, and 3 bins containing 15 gals each of diesel fuel; each "spill" will be mixed in approx 16 cu ft of varied soil substrates in double-lined wooden bins. Contaminated soils from these bins will be disposed by RMOTC at the end of the project. NOTE 1
Waste Management and Waste Minimization	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Are pollution prevention and waste minimization practices needed in the proposed project?	x	☐	☐	Measures are being taken to minimize the risk of spills from the "spill" bins. Full "spill" procedure is being developed with partner. NOTE 2
Does project plan establish procedures in compliance with local, state and/or federal laws and guidelines affecting the generation, transportation, treatment, storage or disposal of hazardous and other wastes?	x	☐	☐	Unleaded gasoline and diesel "spill" mixtures will be transported and disposed of according to accepted procedures. NOTE 3

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	Impacts Anticipated?			If YES, then complete below.
Cultural Impact	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Is there potential for impact on cultural (historic) resources?	☐	x	☐	
Community Impact	**Yes**	**No**	**NA**	**If the anticipated impact might be unacceptable, recommend mitigation measures:**
Will the proposed project introduce significantly adverse auditory, visual, or other impact?	☐	x	☐	
Will the proposed project adversely affect the community's use of public land/resources?	☐	x	☐	
Will the proposed project adversely affect the community's access to private land?	☐	x	☐	

NOTE: Topography Map and Wetlands Map are required to be attached. Attach applicable SOPs for Risk Assessment Level 2 & 3 and specific test procedures.

Are environmental permits required? If YES, list below:	**Yes x**	**No**
Waste management permits.		

Section below to be reviewed by Environmental Specialist and DOE NCO.

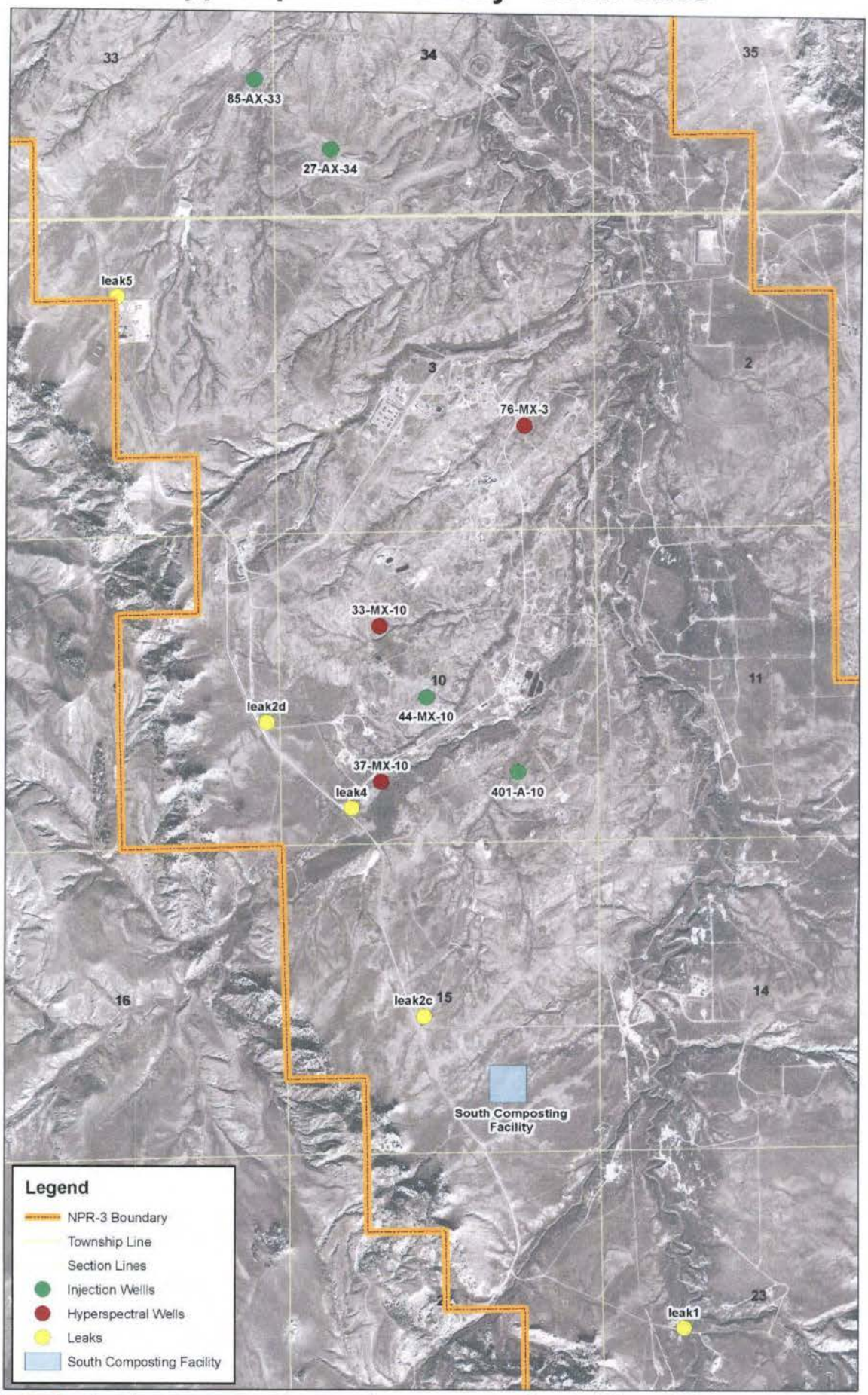
Adequate Mitigation Measures Provided?				**Adequate Mitigation Measures Provided?**	
	Yes	No		Yes	No
Water Quality Impacts	X	☐	Transportation Impacts	X	☐
Air Quality Impacts	X	☐	Waste Management Impacts	X	☐
Wildlife and Habitat Impacts	X	☐	Cultural Impacts	X	☐
Geology and Soils Impacts	X	☐	Community Impact	X	☐
Human Health Impacts	X	☐	**Categorical Exclusion**	X	☐

Approvals

Comments and Conditions:	B3.8 Outdoor ecological/environmental research in small area B3.11 Outdoor tests, experiments on materials and equipment components, no source, special nuclear, or byproduct materials involved
Contractor ESS&H	Stephen Ames — Date 8-10-10
Comments and Conditions:	NOTE #3: DISPOSAL BY DOE APPROVED WASTE SERVICE CONTRACTOR AS PER EPA REQUIREMENTS, AT TS' COST.
	Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1A), I have determined that the proposed action fits within the specified class of actions, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.
DOE NEPA Compliance Officer	NOTE 2: SIMULATED SPILL NOT TO COMMENCE UNTIL "SPILL" PROCEDURE IS APPROVED BY TECHNICAL ASSURANCE DEPT. — Date

CX B 3.8 Michael J Taylor 8/11/10

Hyperspectral Survey - Leak Sites



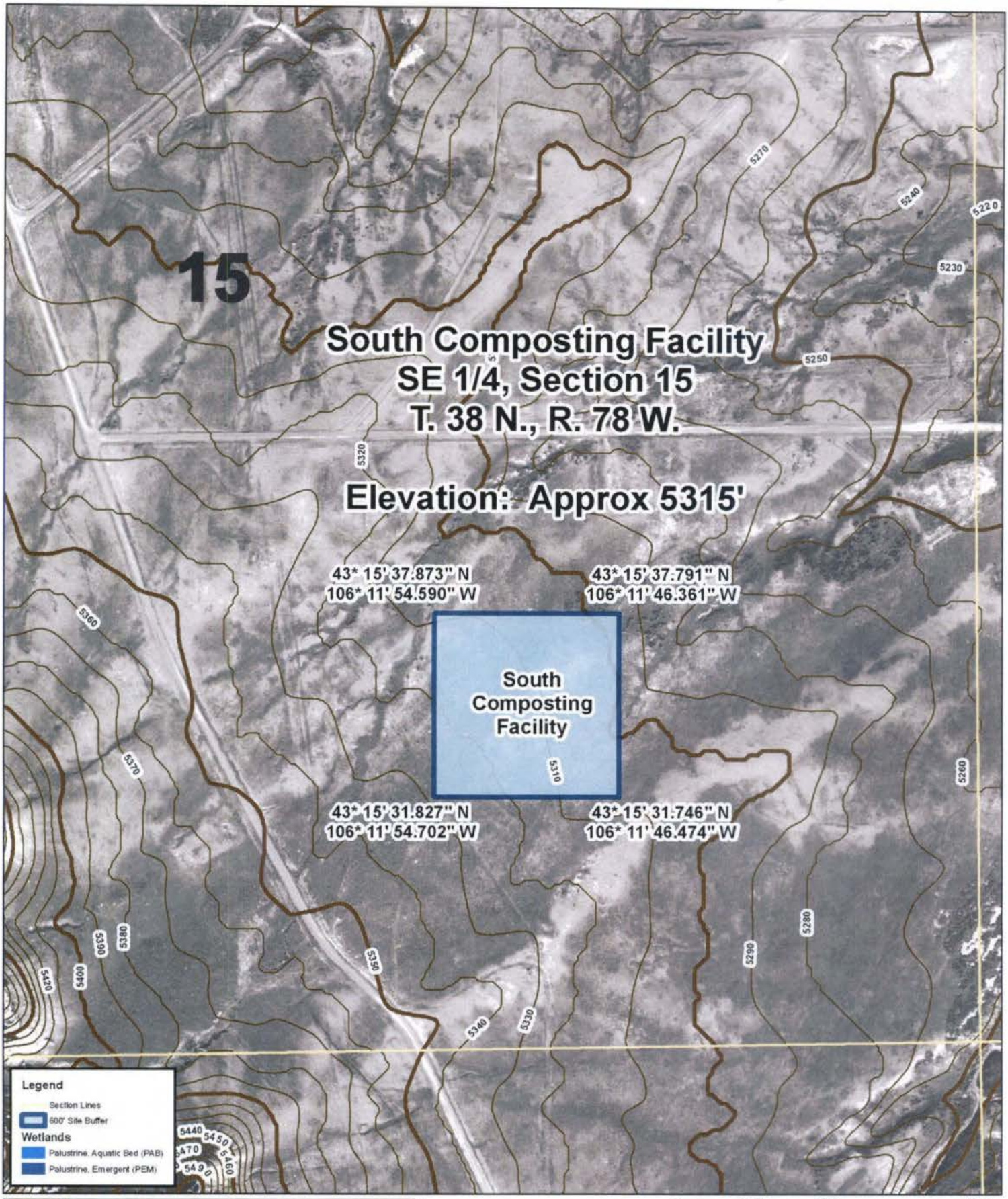
Hyperspectral Survey - Leak Sites		
Author: J Buell	Project Manager: V Stamp	
GIS-Prj-6730.020.61031-2	Date: 07/26/2010	Rev Date: 08/02/2010
WY State Plane / East Central Zone / NAD27		Scale = 1:18,000

Rocky Mountain Oilfield Testing

0 1,250 2,500 5,000 Feet

RMOTC
907 N Poplar, Suite 150
Casper, WY 82601
307-233-4500

Restoration - South Composting Facility



Restoration - South Composting Facility		
Author: J Buelt	Maintenance: W Riesland	
GIS-Rest-6740.010.00000-3	Date: 02/18/2010	Rev Date: 04/28/2010
WY State Plane / East Central Zone / NAD27		Scale = 1:5,000

Rocky Mountain Oilfield Testing

RMOTC
907 N Poplar, Suite 150
Casper, WY 82601
307-233-4800

0 250 500 1,000 Feet

Bin Array / Hydrocarbon / Substrate filling for Hyperspectral Survey

(not to scale)

Figure 1: generalized layout.

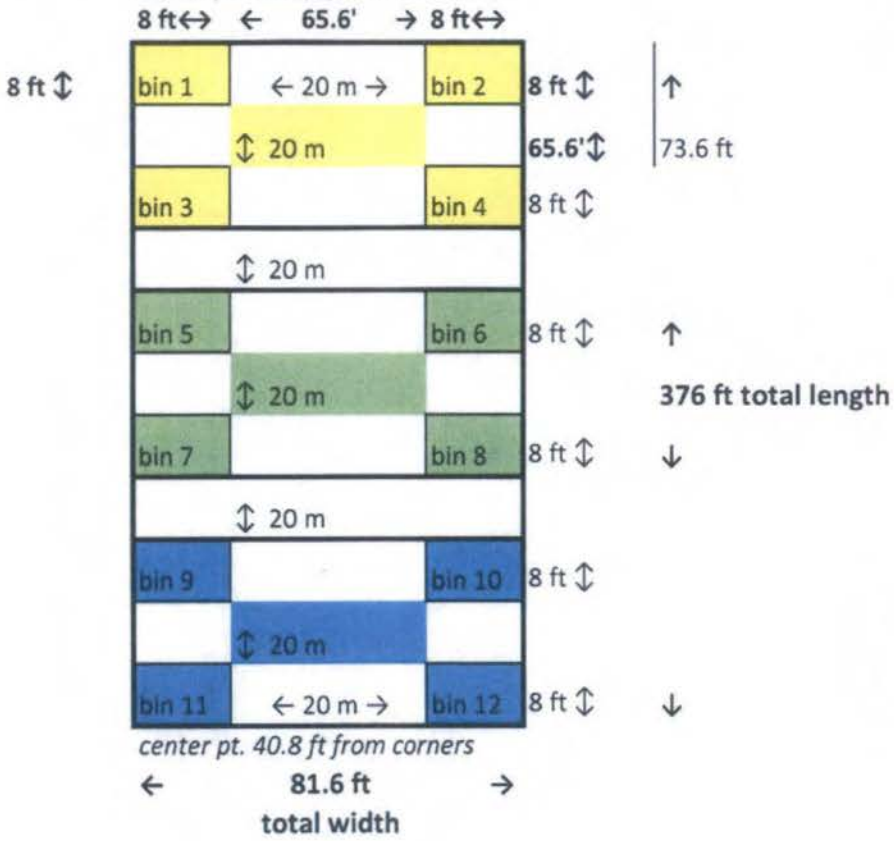


Fig. 2: Key to substrate groups:

	substrate 1 =	***Sandy topsoil***
	substrate 2 =	***Clayey soil (modified base)***
	substrate 3 =	***dolomite-rich***

Total length of array: 100 m + 48 ft = 328 ft + 48 ft = 376 ft

Total width of array: 20 m + 16 ft = 65.6 + 16 = 81.6 ft

Note: 20 m = 65.6 ft

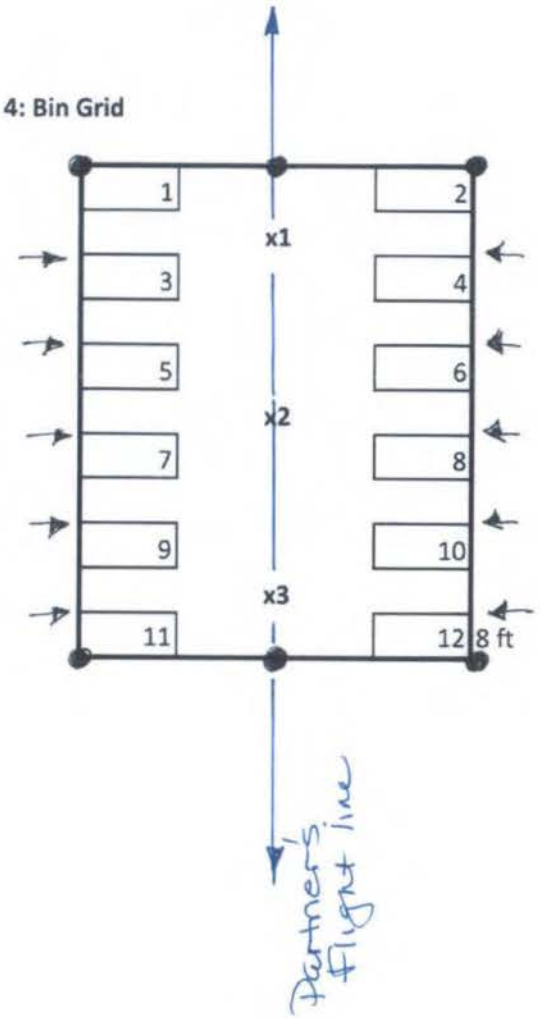
Fig. 3: Key to HC liquids in each substrate group:

29 API	**41 API**	liquids filling scheme per soil group
diesel	**gas**	(transportatn fuels in fuel cans)

Instructions for setting up bin grid: (see Fig. 4)

1. Entire grid (fig 1) to be laid out roughly NW-SE.
2. N and S stakes and corners (see below) will be at GPS'd positions. DO NOT MOVE.
3. Lay out string for N,S, E and W lines (see fig. 1)
4. Place a stake at upper LEFT (NW) corner of west bins per dimensions above (fig. 1)
5. Place a stake at upper RIGHT (NE) corner of east bins per dimensions above (fig. 1)
6. Lay out bins upside down; these will be inverted and placed on tarps at start of test.

Fig. 4: Bin Grid



x: pile of substrate on delivery: (see fig. 2 for key)

● GPS'd stake locations (6 of these); see step 2 above

→ stakes to be placed for bin corners; steps 4 and 5 above (10 of these)