1		- <u></u>			Table 1				
			1	James River Pa		00705)			
					Summary (7/23				
Drum ID	Sample ID	Sample Date	Туре	Size,	Capacity	Contents	Labels	Location	Comments
DR-01*	JRP-DR-01	5/22/2007	Poly Drum '	55-Gallon	1/2 full	Black oily liquid	None	In courtyard in front of door into Room No. 62 office	(Inadvertently Labeled DR-2)
DR-02*	JRP-DR-02	5/22/2007	Steel Tote	300-Gallon	1/8 full	Brown oily liquid	DTE Oil	On Construction pad outside room no. 50	
DR-03*	JRP-DR-03	5/22/2007	Plastic/Poly Container	5-Gallon(approx)	3/4 full	White Granular Solid	None	On Construction pad outside room no. 50	Container open side breached; solid oxidizer
DR-04*	JRP-DR-04	5/22/2007	Plastic Bucket	5-Gallon	Full	Clear Liquid	None	On Construction pad outside room no. 50	aqueous liquid
DR-05*	JRP-DR-05	5/22/2007	Poly Drum	55-Gallon	1/2 full	Yellow viscous liquid	Vinac 884 Emulsion	Inside fence, front of main transformer yard	
DR-06*	JRP-DR-06	5/22/2007	Poly Drum	55-Gailon	1/4 full		None	Auxiliary substation area, near Room No. 21	
DR-07*	JRP-DR-07	5/22/2007	Steel Drum	55-Gallon	1/2 full	Clear Liquid	Gulf Transcrest HI 339379	Near large open pit (No.51A), in front of abandoned pickup truck	
DR-08*	JRP-DR-08	5/22/2007	Poly Drum	55-Gallon	Full		TC Prod Cod 68018	Near large open pit (No.51A), northeast edge of pit near fence	
DR-09*	JRP-DR-09	5/22/2007	Steel Drum	55-Gallon	3/4 full	Brown solid (dirt)	None	Behind buildings, at corner of Rooms No.33 and 37, in Coatings Facility	Solid
DR-10*	JRP-DR-10	5/29/2007	Steel Drum	55-Gallon	Full	Brown oily liquid	Mobil Heavy Lubricating Oil	In Room No. 50	
DR-11*	JRP-DR-11	5/29/2007	Plastic Container (laundry)	3-Galion (approx)	Full	Brown oily liquid	In Laundry detergent container	In Courtyard outside Room No. 26	
DR-12*	JRP-DR-12	E 100/2007	Charle Davies			Clear liquid w/sediment at			
DR-13*	JRP-DR-13		Steel Drum Plastic Container	55-Gallon	1/3 fuli	bottom	None	In Room No. 81 In doorway at entrance to Room	Leaking
DR-14	514-514-15	012012001	Poly Overpack	1-Gallon (approx) 95 gallon	Full 1/3 full	Green liquid	None	No. 81	
DR-15			White Poly Drum	55 gallon	<1/8 full	Reddish liquid		In open pit	
DR-16			Blue Poly Drum	55 gallon	1/8 full	Reduismiliquid		Outdoor Drum Storage	no Bung
DR-17			Blue Poly Drum	55 gallon	<1/8			In open pit Outdoor Drum Storage	
DR-18			1 Fiber Drum	55 gallon	full	Solid	. 101	Under Tank Outside near concrete pit	Deteriorated
DR-19			5 gallon Bucket	5 gallon	full	Solid	Sealant	Power House 51-B Office	Detentitated
DR-20			5 gallon Steel	5 Gallon Bucket	1/2 Full	Liquid	Metal Gear	Power House 51-B	Mobil
DR-21			1 Fiber Drum (same as DR-18)	55 gallon	full	Solid		Under Tank Outside near concrete pit	Deteriorated
DR-22		*	Steel 55 gallon	55 gallan	E.J.	Liquid	DE Oil Heavy		
DR-23			Steel Drum	55 gallon 55 gallon	Full 1/2 Full	Liquid Oil Soaked Rags	Med D931 326 TK		Fiber Dolla
0R-24			Steel Drum	5 gallon	1/2 Full	UII SUaked Rags		Room 50 Room 50	Fiber Paks
R-25 (a,b,c,d)			Oil Collection Bin	220 gallons	Full	oily liquid		Room 50	
)R-26 .			5 gallon	5 gallon	1/4 full	solid grease	Mobil Grease	RR entrance	
R-27			Metal Bucket	5 gallon	1/4 full	Grease	Lithium Grease	RR Platform	
R-28			Plastic Bucket	5 gallon	1/2 full		Liunum Grease	Room 50	
DR-29			Fiber Drum	55 gallon	Full	Foam	+		
DR-30			Plastic Drum	10 gallon	Full	Solid/ with Clear	Solvent Block	Room 50	
DR-31			Blue Poly Drum	55 gallon	<1/8	Liquid		RR Platform	
DR-32 (A,B,C)			Metal Drum	55 gallon		Oil/Liquid	From Pool	RR Platform Room 50	

*- Labeling/Documentation and Haz-catting of these drums performed by Tetra-Tech on behalf of U.S.EPA Site Assessment Group (Region III)

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				Tames River Par Container Log					
Container ID	Sample ID	Sample Date	Туре	Size	Capacity	Contents	Labels	Location	Comments
C-1		+	Plastic Container	<1 gallon	1/4 full	Bar and Chain Oil		IRR Entrance	
C-2		-	Plastic Container	1 gallon	1/4 full	clear liquid	High Detergent	RR Entrance Platform	· .
							Cleanser, Step		
C-3			Plastic Container	1 galion	1/2 full	Yellow Liquid	Germicide	RR Entrance Platform	
C-4			Plastic Container	Quart	1/4 full	Oily Liquid	4 cycle Oil	RR Entrance Platform	
					-				
C-5			Metal Can	Pint	Full	Polyester Poly Filler		Platform	
C-6	1		·····	1 lb.	Full	Grease Solids	Packing Lab	RR Platform	1
					1		J		
		1	:		1		1	Maintenance Loading Dock File	
C-8			4 plastics	1 gallon		Yellow Liquid	Imunol	Room	
							Triple Play		
C-9			Plastic	1 gallon		Yellow Liquid	Cleanser	Maintenance Locker Room	
C-10			Clear Plastic	1 gallon		Clear Liquid		Maintenance Shed	
			·		1		Flexane		
C-11			Metal Bottle	1 guart		· ·	Accelerator	Maintenance Shed #22	
C-12			Metal Container	1/2 pint		Liquid	Universal Primer	Maintenance Room/ Paint Shop	
							High Build	······································	
							Elastomer		
C-13			Metal Container	3.5 ounce		Liquid	Solidifier	Maintenance Room/ Paint Shop	
	t	1			+			manisonarioo roomii Faint onop	ł
C-14	1	1	Metal Container	30 killogram	1	Liquid	Ceramics-Metal	Maintenance Room/ Paint Shop	
	<u> </u>	1		Jo mogium	+	- Main	Belona Release	maintenunce room/ raint onop	
C-15	I	1	Metal Container	.5 ounce		Liquid	Agent	Maintenance Room/ Paint Shop	
		<u> </u>			+		/ yen	pmaintenance room/ Paint Shop	
C-16]	1	Plastic Container			Solid	0414	Maintenance Room/ Paint Shop	
		1			+		PMC Comosant	maintenance Room/ Paint Shop	
C-17			Plastic Container	Pint	1	Solid	PMC Comosant P/N 12875	Maintonance Ream! Daint Of	
	<u> </u>	+					F/14 120/5	Maintenance Room/ Paint Shop	ł
1	ł	1			1		Cortos		
C-18			Aluminum Tube	ounce	1	Solid	Certanum Modified Amines	Maintonance Ream! Drint Of	
		ł	Aldriandin Tube		+	5010		Maintenance Room/ Paint Shop	
C-19 (A,B,C)			Plastic Tub				Ceramics Metal		
0 10 (1,0,0)			Flastic Tub	1/2 gallon	 	grey solid	Base Grey	Maintenance Room/ Paint Shop	
C-20			Metal Can	D.F. Caller		0.114	Polymer		
0 20			Metal Call	2.5 Gallon		Solid	Compound Base	Maintenance Room/ Paint Shop	
						· ·			
C-21 (A,B,C,D)	1		Diantia Turk				Super Protectant		
C-21 (A, B, C, D)			Plastic Tub	quart		Solid	part #12877A	Maintenance Room/ Paint Shop	
1									
C-22 (A,B,C)			Discuss # 1				Super Protectant		
C-22 (A,B,C)			Plastic Tub	Pint		Liquid	part #12877A	Maintenance Room/ Paint Shop	
C 22 (A D)							Cyrobond 806		
C-23 (A,B)			Plastic Bottle	5 pint		Solid		Maintenance Room/ Paint Shop	
							Cyrospray 836		
C-24		L	Plastic Bottle	Pint		Solid	Powder	Maintenance Room/ Paint Shop	
		· ·					Belona Ceramics		
·		1					Metal Solidifier		
C-25			Metal Can	Pint		Liquid	Blue	Maintenance Room/ Paint Shop	
							Chem Stud		
_							Capsule Anchors	•	
C-26			Box	6 viles		Liquid	3/4"	Maintenance Room/ Paint Shop	
. –				1	1		Chem Stud		
4				1	1		Capsule Anchors		1
C-27			Box	2 viles		Liquid	1/2"	Maintenance Room/ Paint Shop	
							Cyrospray 836		
C-28			Plastic Bottle	Pint		Solid	Powder Ni/Cr		
C-29 (A, B)			Clear Poly Bottle	1 gallon	Full	Oily Liquid	1	Maintenance Sampling Room	
C-30			Plastic Bucket	5 gallon	3/4 Full	Coolant		Maintenance Sampling Room	
· · · · · · · · · · · · · · · · · · ·									
	I .	1					Oxygen		
C-31			Fiber Container	100 lb.	Full			Maintenance Sampling Room	
C-32		· .	Steel Bucket	5 gallon	3/4 Full	Solid	Paint	Maintenance	
C-33			Bag	100 lb.	Full	Solid	Caustic Sodium	Powerhouse	
C-34			Steel Bucket	5 gallon	1/4 Full	Solid	Tar	Room 19	
C-35			Steel Bucket	5 gallon	3/4 Full	Solid	Tar	Room 19	
C-36			White Poly Bucket	5 galion	1/2 Full	Liquid	Dark Oily Liquid	Pressure Washer Cleaner	
			Clear Poly	1 gallon	1/8 Full	Liquid	Oily	Chlorine Building Trans Yard	
C-37			Box	1/2 gallon	1/2 full	Liquid	Battery Acid	Room 30 Corner Office	·
C-37 C-38.			Plastic Tube	Tube	1/2 Full	Solid	587 Locktite	Room 30 Corner Office	
C-37 C-38.				<u> </u>	1	<u> </u>			
C-37 C-38.		<u> </u>		+ · · · · · · · · · · · · · · · · · · ·	†	<u>├──</u>		·····	
C-37 C-38.						1			
C-37 C-38.				+				At Duilding Adjacents ET	
C-37 C-38. C-39			Steel Cylinder (Propage)	25 gallon	мл			At Building Adjacent to ET	
			Steel Cylinder (Propane)	25 gallon	м/т			Drum Storage	
C-37 C-38. C-39			Steel Cylinder (Propane)	25 gallon	м/т			Drum Storage At Building Adjacent to ET	
C-37 C-38 C-39 C-39								Drum Storage At Building Adjacent to ET Drum Storage Outside Garage	
C-37 C-38 C-39 C-39			Steel Cylinder (Propane) Steel Cylinder (Propane)	25 gallon 26 gallon	м/т			Drum Storage At Building Adjacent to ET Drum Storage Outside Garage Door	
C-37 C-38. C-39								Drum Storage At Building Adjacent to ET Drum Storage Outside Garage	
C-37 C-38. C-39 CY-1 CY-2			Steel Cylinder (Propane)	26 gallon	м/т.			Drum Storage At Building Adjacent to ET Drum Storage Outside Garage Door	
C-37 C-38 C-39 C-39								Drum Storage At Building Adjacent to ET Drum Storage Outside Garage Door At Building Adjacent to ET	
C-37 C-38. C-39 CY-1 CY-2			Steel Cylinder (Propane)	26 gallon	м/т.			Drum Storage At Building Adjacent to ET Drum Storage Outside Garage Door At Building Adjacent to ET Drum Storage Inside Garage Door	
C-37 C-38 C-39 C-39 CY-1 CY-2 CY-2 CY-3			Steel Cylinder (Propane)	26 gallon	м/т.			Drum Storage At Building Adjacent to ET Drum Storage Outside Garage Door At Building Adjacent to ET Drum Storage Inside Garage Door At Building Adjacent to ET	
C-37 C-38. C-39 CY-1 CY-2			Steel Cylinder (Propane)	26 gallon	м/т.			Drum Storage At Building Adjacent to ET Drum Storage Outside Garage Door At Building Adjacent to ET Drum Storage Inside Garage Door	

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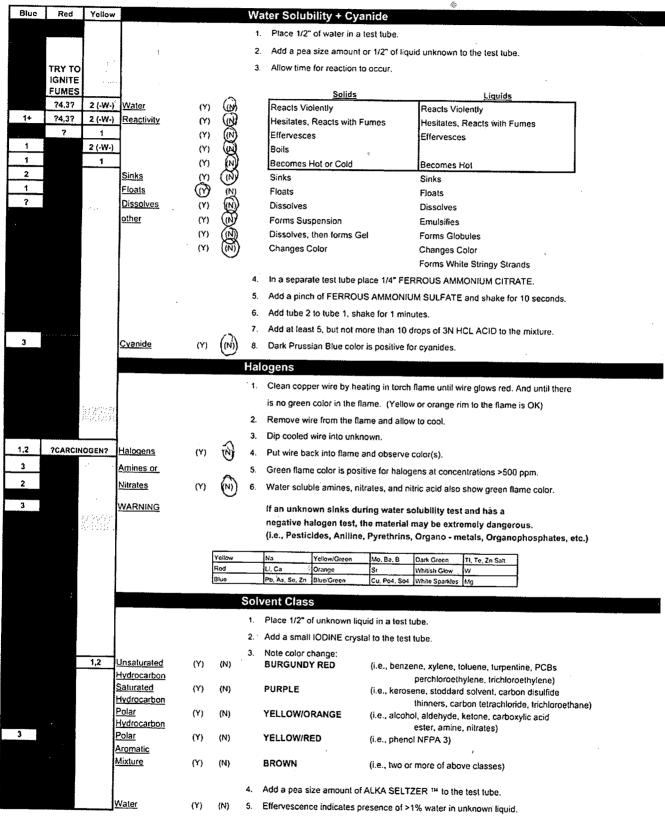
					Table 3 Paper Mill Site (1 Summary (7/23/07			· · ·	
Drum ID	Sample ID	Sample Date	Туре	Size	Capacity	Contents	Labels	Location	Comments
T-1 '			Poly Tank	200 gallon	<1/8 Full	Paste Advantage 1529		Center Room #6	
T-2			Steel Tank	100 gallon	3/4 Full	Liquid Soaked Paper		Center Room #6	
Т-3	·		Poly Tank	200 gallon	1/4 Fuil	White Chalky Substance		Center Room #5	

	Table 4 James River Paper Mill Site (100705) Pictures Collected, Documentation performed, But Drums Not Retrieved Yet Log Summary (7/23/07)											
Drum ID	Sample ID	Sample Date	Туре	Size	Capacity	Contents	Labels	Location	Comments			
0383			Metallic Grout					Room 50				
0385			Industrial Starch					Tamol SN 6-0224				
404, 406		1	Press Machine Oil/Cleaners ditches around base 2 Drums									

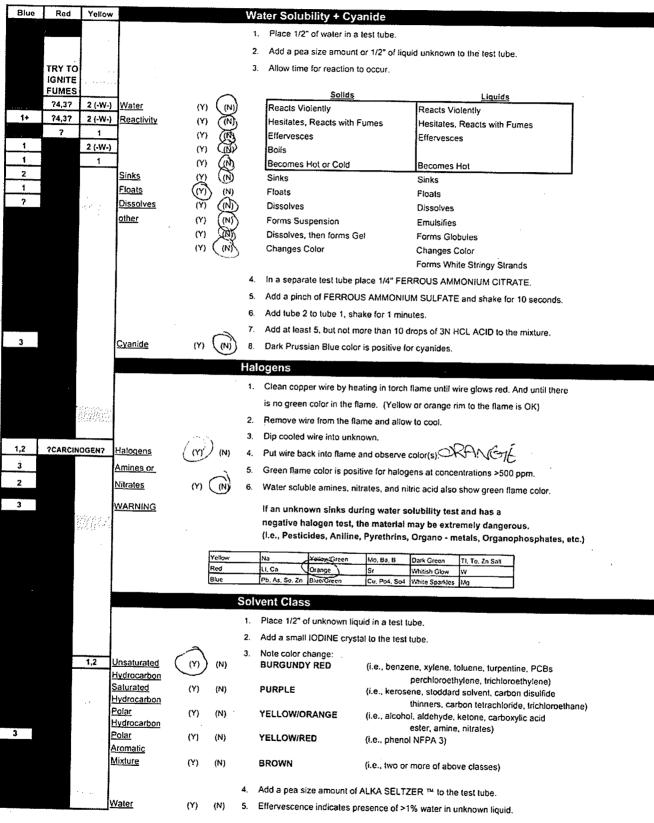
Attachment A Tetra Tech Drum Screening Data

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Combu	stable			, i		
· - ·	Ita u u					
Black	:/tan	w/ai	sphalt od	dov		LIQUID/SOLID SCREENING DATA
		1	• . •		۲	
ⁱ e					of Label	S A
				_ <u>a</u> /	<u> </u>	- DR - 0) %02 ZO 9
•			1			FID
•		7				PID 3.2 RAD
	\sim	•		_		
Blue	NFPA MARKI	Yellow				General Reactivity
	4	2	Pyrophoric	(Y)	(N)	Place a pea size amount of solid or dime size pool of liquid on a watch glass.
			Water	x+,	** ;	 Place a pea size amount or solid or dime size pool or liquid on a watch glass. Wet pH test strip with 2-3 drops of water and touch to unknown.
		(-W-)	- Reactivity	(Y)		Viet ph test strip with 2-3 drops of water and touch to unknown. Strong reaction (heal, fumes, spitting) indicates water reactive.
			Incourse,	,	\odot	 Strong reaction (neat, turnes, spitting) indicates water reactive. Compare colors on a test strip to color chart. pH=
	(ACID	or ALK)	Corrosivity	(Y)	IN	
		(Gonositie	·· <i>·</i>	\odot	
		1				 Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID Touch wetted paper to unknown.
		(OX)	Oxidizer	(Y)		
					<u> </u>	8. Rapid paper color change to black, purple, or blue/black indicates oxidizer stow change, het repict
		i '	II UXIULER SEE	it is posie.	70, uu r	peroxide test (8A & 8B), otherwise proceed to step 9
		1 '				8a. Solids - wet PEROXIDE test strip with water and touch to unknown.
		i .'				Aqueous liquids - dip PEROXIDE test strip into unknown.
		1+	Peroxide	/ Y1	A 1)	Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.
			Peloxius	(Y)	(N)	8b. Color change of test strip to blue indicates peroxide.
						9. Wet LEAD ACETATE test paper with water.
2		į J	Sulfide	(V)	(iii)	10. Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown.
		1 1	Sumue	(Y)	\sim	11. Color change of paper to brown/black is positive for sulfides.
		, 1				Shock Sensitivity
		, 1	1			1. Place a few grains of solid or dime size pool of liquid on a watch glass.
			Sepsitive	- 14		2. Heat a hairpin until it is cherry red.
	3		Sensitive	. (Y)		3. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! Slight yeaction
	2	3	f	(Y)	(N)	4. If no noticeable reaction, put hairpin back in flame. FLAME! Sime ke
	2	2	<u>Reactive</u>	- (W)). (N)	5. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. sinci/e, step 4 flame
		, 1				Flammability
1,2		, † P	<u>Volatile</u>	(Y)	(N)	1. Place a few grains of solid or quarter size pool of liquid on a watch glass.
		,)	1		\$	2. Bring lit match from above unknown surface.
	4	. 1	1	(Y)		EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown.
	3	. Sager J	Ignition	(Y)		FLAMMABLE = Flame jumps to unknown.
	2	1980 a.	1	(Y)	(\mathbb{N})	FLAMMABLE = Unknown continues to burn after match is removed.
	1	·	1	\odot	(N)	COMBUSTIBLE = Unknown burns with match as a wick.
	O	1	í –	(Y)	(\mathbb{N})	NON-FLAMMABLE = Liquids extinguish match/solids do not burn.
			lif unknown is	non-flam	mable,	proceed to step 3, otherwise go to water solubility
			1	Avn		 Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.
			1			
			1			and the second reaction and produces table begins to men.
		.	1			5. While heating, try to ignite vapors or smoke that is being driven out of test tube.
			i			6. Indicators of organic compounds:
		ļ	1			Solids Liquids
	A	ľ	<u>Organic</u>	(Y)	(N)	Chairs with ignitable smoke Evaporates with ignitable vapors
	1	1	-			Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke
-			1			Fars with ignitable smoke Forms scales which char with ignitable vapors or smoke
						Sublimes with ignitable vapors Evaporates, then chars or tars

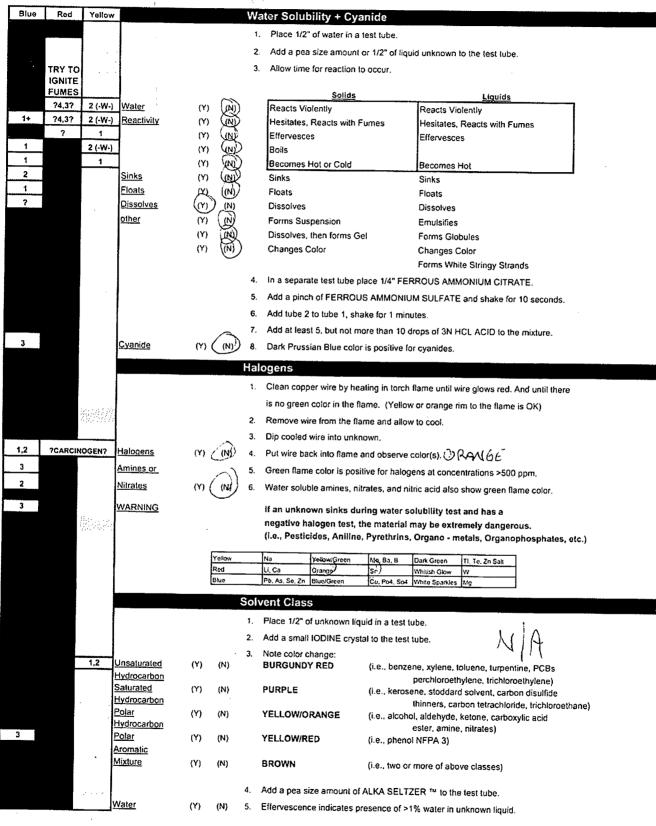
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CAMBUSTIELS TAN LY AND	μ.	drocarb	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		• -			L	QUID/SOLID SCREENING DA	ATA .	
Wind of Ledel Inde Virtual Control Virtual Cont	•		а							Air Monitoring Readings	
					۹ ۲	lame o	of Labe		<u></u>	Headspace 0-6" >6"	
NEPA MARKNES But Red Table But Red Table Attack Companies (N) (N) <t< td=""><td></td><td></td><td></td><td>;</td><td>Ē</td><td><u> </u></td><td></td><td></td><td><u> </u></td><td>%LEL</td><td></td></t<>				;	Ē	<u> </u>			<u> </u>	%LEL	
PARAMENDOS VERAMENDOS VERAMEND				1	É	5124	210	<u>+</u>			
Blue Red Volum Control Rescul (V) (V) 4 2 Parabanic (V) (W) 1 Photo a pask size amunut of solid or dime size pool of fload on a watch glass. 4W3 Blacchiny (V) (W) 3 Strong reaction (Next, Lines, splitticg) indicates water reactive. 4W3 Blacchiny (V) (W) 3 Strong reaction (Next, Lines, splitticg) indicates water reactive. 4ACID or ALLO Catronabilizy (V) (W) 3 Strong reaction (Next, Lines, splitticg) indicates water reactive. 4ACID or ALLO Catronabilizy (V) (W) 5 Photo a pask size amunut of solid or dime size pool of load on a watch glass. 4ACID or ALLO Catronabilizy (V) (W) 5 Strong vector change to stain (n indicates, partice), strong vector change of a size partice intervalues and touch to unknown. 4ACID or ALLO Catronabilizy (V) (W) 8 Repaid paper color change of paper to brownback fload on a watch glass. 4ACID or ALLO Catronabilizy (V) (W) 8 Repaid paper vector change or paper with water and touch to unknown. 4ACID or ALLO			Ζ		L						
Blue Red Yellow Concretal Repart(y(y) 4 2 Excellance: (1) (1) Pleze a pas axe amunut of solid or dime size pool of flaud on a watch giss. 4 2 Watter 2 We pipe in subject of the subject of			F.								
4 2 Britischeric (*) (*) (*) Place apres size amount of solid or dime size pool of liquid on a watch glass. 4 2 Yatar (*) <td< td=""><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td>Ge</td><td>neral Reactivity</td><td></td><td></td></td<>								Ge	neral Reactivity		
Water 2. Weip Hist strip with 2-3 drops of water and souch to unknown. (W) Basciluity (Y) (W) String reaction (meat, fumes, spling) indicates water reactive. (ACID or ALK) Compare colors on a test strip to color charm, bit to color charm, colo		4	1	Pyrophoric		(Y) (ime size pool of liquid on a watch glass.	
4.000 Bastikuty (Y) (N) 3. Strong reaction (next, furres, spiling) indicates water reactive. 4. Compare doits on a test simp to object chart, pH=	4					•••	$\dot{\mathbf{\nabla}}$	/			
Compare colors on a test sing to color chart. pHs			(-W-)	Reactivity		(Y)				•	
ACID or ALS) Correstivity (Y) (N) 5. pH=0.14 (NFPA 3): pH=3.4.10.11 (NFPA 3): pH=5.6.8. (NFPPA):						•	·	/			
		(ACID) or ALK)	Corrosivity		(Y)	(N)	5.			
2 2. Touch wetted paper to unknown. 4 0. Repid paper color change to black, purple, or blackblack indicates existizer If Oxidizer test is positive. G5 percoded test (A & BB, Dickows proceed to step 9 4. Salds - wet PEROXIDE test strip with water and touch to unknown. Aqueous liquids - dip PEROXIDE test strip into unknown. Aqueous liquids - dip PEROXIDE test strip into unknown. Aqueous liquids - dip PEROXIDE test strip into unknown. Aqueous liquids - dip PEROXIDE test strip into Unknown. 1* Peroxide 9 Wet LEAD ACCTATE test paper with water. 10 Hod paper or unknown while adding 6 dorps of 3M HCL ACID to unknown. 10 Hod paper or unknown while adding 6 dorps of 3M HCL ACID to unknown. 2 Suifide (Y) 2 Suifide (Y) 2 A sensitive (Y) 3 Color change of paper our known on a walch glass. 2 4 Sensitive 2 4 Sensitive 2 4 Sensitive 2 2 Reamive 3 1 Puece a test grains of solid or quarter size pool of liquid on a watch glass. 2				1			•	6.		/	
(0) Outlider (Y) (R) 8. Rapid paper color change to black, purple, or blueblack indicates oxidizar If Oxidizer test is positive, 66 percovide test (AA 68), otherwise proceed to step 9 8. Solids - well PEROXIDE test strip with water and touch to unknown. Aqueous liquids - with PEROXIDE test strip in the unknown, allow to dry, line wet wwater. 1* Percovide (Y) (N) 4. Color change of test strip in blue indicates percovide. 2 Sulfide (Y) (N) 4. Color change of test strip in blue indicates percovide. 2 Sulfide (Y) (N) 1. Color change of test strip in buke indicates percovide. 2 Sulfide (Y) (N) 1. Color change of test strip in buke indicates percovide. 2 Sulfide (Y) (N) 1. Color change of paper to browhlack is positive for sulfides. 3 A Sensitiva 1. Place a few grains of solid or drine size pool of liquid on a watch glass. Shock 2 4 Sensitiva Y) N) 4. If there is sulf no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. 12 Reactive Y) N) 4. If there is sulf no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. 14 Y) N) For molecosine reaction, put harps hach f							\sim				
1 Oxidizar tost is positive, do perculde test (8A & 8B), otherwise proceed to step 9 8. Solids - well PERCXIDE test stip with water and touch to unknown. Aqueous liquids - dip PERCXIDE test stip unknown. Organic solvent - dip test stip unknown, allow to dry, then wet wiwater. 1 Percoxide (Y) (N) 8 Color change of test stip unknown, allow to dry, then wet wiwater. 2 Sulfide (Y) (N) 8 Color change of test stip unknown, allow to dry, then wet wiwater. 2 Sulfide (Y) (N) 8 Color change of test stip unknown, allow to dry, then wet wiwater. 2 Sulfide (Y) (N) 11 Color change of paper to brownblack is positive for sulfides. 2 Sulfide (Y) (N) 11 Color change of solid or drive size pool of liquid on a watch glass. 3 4 Sansitive (Y) (R) 1 Color change of quarter size pool of liquid on a watch glass. 2 2 Reactive (Y) (R) 1 To noticeable reaction, put hairpin back in fame. FLAMEI 1 1 If on oniceable reaction, put hairpin back in fame. FLAMEI 1 Place a few grains of solid or quarter size pool of liquid on a watch glass. 2			(OX)	Oxidizer		(Y)	(IN)) 8.	•	urple, or blue/black indicates oxidizer	
2 Solids - wel PEROXIDE test strip with water and touch to unknown. Aqueous liquids - dip PEROXIDE test strip in unknown. 11 Paroxide 12 Suffide 14 Paroxide 15 Suffide 16 Peroxide 17 Paroxide 18 Suffide 19 Paroxide 10 Hold paper over unknown while adding 5 drops of SM HCL ACID to unknown. 10 Hold paper over unknown bhatk is positive for suffides. 2 Suffide (Y) 10 Hold paper over unknown bhatk is positive for suffides. 2 Sanative (P) 10 False a few grains of solid or dime size pool of liquid on a watch glass. 2 3 (Y) 2 Reactive (P) 2 Reactive (Y) 12 Reactive (Y) 2 Reactive (Y) 3 A Singli match from above unknown surface. 2 Reactive (Y) 4 (Y) (W) 3 Linkide Yalatile <td></td> <td></td> <td></td> <td>If Oxidizer te</td> <td>est is p</td> <td>ositiv</td> <td>10, do</td> <td></td> <td></td> <td></td> <td></td>				If Oxidizer te	est is p	ositiv	10, do				
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1* Peroxide (Y) (N) 8b. Color,change of test strip to blue indicates peroxide. 9 Wet LEAD ACETATE test paper with water.]							
P. Wet LEAD ACETATE test paper with water. 10. Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown. Sulfide (Y) (N) 11. Color change of paper to brown/black is positive for sulfides. Shock Shock Place a few grains of solid or dime size pool of liquid on a watch glass. Shock Place a few grains of solid or dime size pool of liquid on a watch glass. You with a dime of the size pool of liquid on a watch glass. You with a dime of the size pool of liquid on a watch glass. You with a transmitter of the size pool of liquid on a watch glass. You with a transmitter of the size pool of liquid on a watch glass. You with a transmitter of the size pool of liquid on a watch glass. You with a transmitter of the size pool of liquid on a watch glass. You with a transmitter of the size pool of liquid on a watch glass. You with a transmitter of the size pool of liquid on a watch glass. You with a transmitter of the size of the size pool of liquid on a watch glass. You with the size of the size of a dimension of solid or quarter size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the size of the size pool of liquid on a watch glass. You with the size of the s			1+	Peroxide	i.	(Y)	(N)	8b.			
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3 Ignition (Y) (W) FLAMMABLE = Flame jumps to unknown. 2 (Y) (W) FLAMMABLE = Unknown continues to burn after match is removed. 1 (Y) (W) FLAMMABLE = Unknown burns with match as a wick. 0 (Y) (W) COMBUSTIBLE = Unknown burns with match/solids do not burn. 1 (Y) (W) NON-FLAMMABLE = Liquids extinguish match/solids do not burn. If unknown is non-flammable, proceed to step 3, otherwise go to water solubility 3. Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. 4. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. 5. While heating, try to ignite vapors or smoke that is being driven out of test tube. 6. Indicators of organic compounds: Solids Liquids 1 Organic (Y) (N) Chairs with ignitable smoke Forms scales which char with ignitable vapors or smoke		4	1	l	,	ni (Ζ.			
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1 (i) (i) COMBUSTIBLE = Unknown burns with match as a wick. 0 (i) (ii) COMBUSTIBLE = Unknown burns with match as a wick. 0 (iii) (iii) NON-FLAMMABLE = Liquids extinguish match/solids do not burn. If unknown is non-flammable, proceed to step 3, otherwise go to water solubility 3. Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. 4. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. 5. 5. While heating, try to ignite vapors or smoke that is being driven out of test tube. 6. 6. Indicators of organic compounds: Solids Solids Liquids 1 Organic (Y) 0 Chairs with ignitable smoke Forms scales which char with ignitable vapors or smoke				IGLINDON		``	\times				
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1 Organic (Y) (N) Chairs with ignitable smoke Evaporates with ignitable vapors or smoke			1	l	~	~ ,	\sim				
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 4. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. 5. While heating, try to ignite vapors or smoke that is being driven out of test tube. 6. Indicators of organic compounds: Solids Liquids 1 Organic (Y) (N) Chairs with ignitable smoke Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke 			i	lf unknown is	s non-fi	lamm	able, j	proc	ed to step 3, otherwise go to water s	solubility	
 4. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. 5. While heating, try to ignite vapors or smoke that is being driven out of test tube. 6. Indicators of organic compounds: Solids Liquids 1 Organic (Y) (N) Chairs with ignitable smoke Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke 			l ·	l				3.	Place 2 pea size amounts of solid or 1/	/2" of liquid unknown in a test tube.	
5. While heating, try to ignite vapors or smoke that is being driven out of test tube. 6. Indicators of organic compounds: <u>Solids</u> <u>Liquids</u> 1 Organic (Y) (N) Chairs with ignitable smoke Evaporates with ignitable vapors Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke			l ···	l						, *	
6. Indicators of organic compounds: Solids Liquids 1 Organic (Y) (N) Chairs with ignitable smoke Evaporates with ignitable vapors Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke			1 1								
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1 Organic (Y) (N) Chairs with ignitable smoke Evaporates with ignitable vapors Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke				I					Solids	Liquids	
Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke		1		Organic	ſ	Y)	(N)		A		
						.,			• • • • • • • • • • • • • • • • • • •		
Cubines with ginable verbis Evaporates, then chars or tars											
Liquid shoots out explosively											X

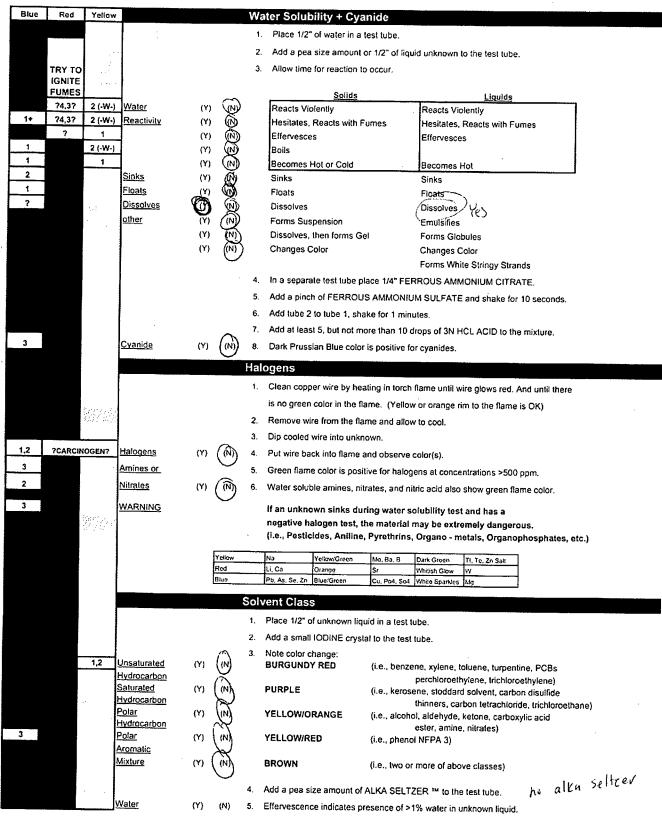


:	PH = 13				
۰.	oxidizer				
	pH=13 oxidizer Non.flamma	ole		LIQUID/SOLID SCREEN	NG DATA
	NFPA MARKINGS		ame of Label	Info R-03-	Air Monitoring Readings Headspace 0 - 6" %02 2.2 %LEL 2 FID - PID 2 RAD -
·	Blue Red Yellow			Seneral Reactivity	
	4 2	Pyrophoric	(Y) (N)		olid or dime size pool of liquid on a watch glass.
	-	Water	~		ps of water and touch to unknown.
	(-W-)	Reactivity	(M) (N)		spilling) indicates water reactive.
	(ACID or ALK)	Corrosivity	N (N)	 Compare colors on a test strip pH=0.14 (NEPA 4): pH=1.2 1: 	
			_		2(3)(NFPA 3), pH=3.4.10.11 (NFPA 2): pH=5.6,8,9 (NFPA 1) N paper w/2-3 drops of 3N HCL ACID
				 Touch wetted paper to unknow 	
	(OX)	Oxidizer ((N) (Y		plack, purple, or blue/black indicates oxidizer
		If Oxidizer test is po	ositive, do pe	roxide test (8A & 8B), otherwise	
					trip with water and touch to unknown.
				Aqueous liquids - dip PEROX	
		4		Organic solvent- dip test strip	in unknown, allow to dry, then wet w/water.
	1+	Peroxide (Y) ((N) E	b. Color change of test strip to bl	ue indicates peroxide.
				9. Wet LEAD ACETATE test pap	
́.	2		\sim		e adding 5 drops of 3N HCL ACID to unknown.
	-	<u>Sulfide</u> (1. Color change of paper to brow	n/black is positive for sulfides.
			S	hock Sensitivity	
		<u>Shock</u>			lime size pool of liquid on a watch glass.
	3 4	Sensitive (*	\cap	 Heat a hairpin until it is cherry Touch cherry red hairpin to un 	
	2 3	<u></u>		 If no noticeable reaction, put h 	known on a watch glass. VIOLENT REACTION!
	2 2	Reactive (1	2		3 drops 3N HCL and repeat steps 3 & 4.
				ammability	
	1,2	Volatile ()			
		(.	2		uarter size pool of liquid on a watch glass.
	4	n	\sim		Flame jumps 2" or more to unknown.
	3	Ignition (Y	\sim	FLAMMABLE = Flame jumps to	
		(Y			inues to burn after match is removed.
	1	n M		COMBUSTIBLE = Unknown bu	rns with match as a wick.
•	0	(n) (N)	NON-FLAMMABLE = Liquids e	xtinguish match/solids do not burn.
,		If unknown is non-fig	immable, pro	oceed to step 3, otherwise go to	water solubility
					lid or 1/2" of liquid unknown in a test tube.
			4.		til no further reaction takes place/test tube begins to melt.
			5.		rs or smoke that is being driven out of test tube.
			6.		
			\wedge	Solids	Liquids
	1	Organic (Y	((N))	Chairs with ignitable smoke	Evaporates with ignitable vapors
			\smile	Tars with ignitable smoke	Forms scales which char with ignitable vapors or smoke
				Sublimes with ignitable vapors	Evaporates, then chars or tars
					Liquid shoots out explosively



	···~ 'Y		ter solution	•		LI	IQUID/SOLID SCREENING DATA
	•						
			1	Name	of Labe	el Info	Air Monitoring Readings Headspace 0 - 6" > 6"
			i.	1	RP-	DŔ	<u>%02 20.9</u> %LEL 0
							FID
			1				PID
	\checkmark		:				
	MARKING						
Blue I		ellow			\sim		neral Reactivity
	4		vrophoric	(Y)	(\mathbb{N})		Place a pea size amount of solid or dime size pool of liquid on a watch glass.
			<u>/ater</u>		\sim	2.	Wet pH test strip with 2-3 drops of water and touch to unknown.
		(•₩-) <u>R</u>	eactivity	(Y)		3.	
					6	4.	Compare colors on a test strip to color chart. pH=G
(ACID or A		orrosivity	(Y)	\odot	5.	pH=0.14 (NFPA 4): pH=1,2,12,13 (NFPA 3): pH=3,4,10,11 (NFPA(2): pH=5,6,8,9 (NFPA 2))
						6. ~	Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID
		(ox) O	xidizer	~~~		7.	Touch wetted paper to unknown.
		<u> </u>		(Y) itinon ol t	W	8.	Rapid paper color change to black, purple, or blue/black indicates oxidizer
		ľ	OXIGIZEI (85	n is hosin	ve, uo		xide test (8A & 8B), otherwise proceed to step 9
	·					68.	Solids - wet PEROXIDE test strip with water and touch to unknown.
							Aqueous liquids - dip PEROXIDE test strip into unknown.
		1+ P	eroxide	(Y)	(N)	8h	Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.
				())	((4)	9.	Color change of test strip to blue indicates peroxide. Wet LEAD ACETATE test paper with water.
						J.	
2		S	ulfide	(Y)	(N)		Color change of paper to brown/black is positive for sulfides.
				(*/	9		
		-					ock Sensitivity
		SI	nock			1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red.
	3		ensilive	(Y)	(M)		Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!
	2	3		(Y)		4 .	If no noticeable reaction, put hairpin back in flame. FLAME! Slight Orange flam
	2	2 Re	eactive	(Y)	ä	5.	If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4.
					0		
1,2		Ve	platile	(V)	~~		mmability
				(Y)		1. 2	Place a few grains of solid or quarter size pool of liquid on a watch glass.
	4			(Y)	\bigcirc	2,	Bring lit match from above unknown surface.
		. I	nition	(Y)	9		EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown. FLAMMABLE = Flame jumps to unknown.
	3	100		(Y)			FLAMMABLE = Frame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed.
	3				<u>(</u>)		
	3				an		
	3			(Y)	(N)		COMBUSTIBLE = Unknown burns with match as a wick.
	3 2			(S) (S) (S)	(N)		COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn.
	3 2		ınknown is r	(S) (S) (S)	(N)		COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility
	3 2		ınknown is r	(S) (S) (S)	(N)	3.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.
	3 2		ınknown is r	(S) (S) (S)	(N)	3.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility
	3 2		ınknown is r	(S) (S) (S)	(N)	3. 4,	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.
	3 2		unknown is r	(S) (S) (S)	(N)	3. 4. 5.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt.
	3 2		Jnknown is r	(S) (S) (S)	(N)	3. 4. 5.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube.
	3	in the second se	unknown is r Qanic	(S) (S) (S)	(N)	3. 4. 5.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds:
	3	in the second se		(S) (S) (S)	(N)	3. 4. 5. 6.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids Liquids Chairs with ignitable smoke Evaporates with ignitable vapors
	3	in the second se		(S) (S) (S)	(N)	3. 4. 5. 6.	COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids Liquids Chairs with ignitable smoke Evaporates with ignitable vapors

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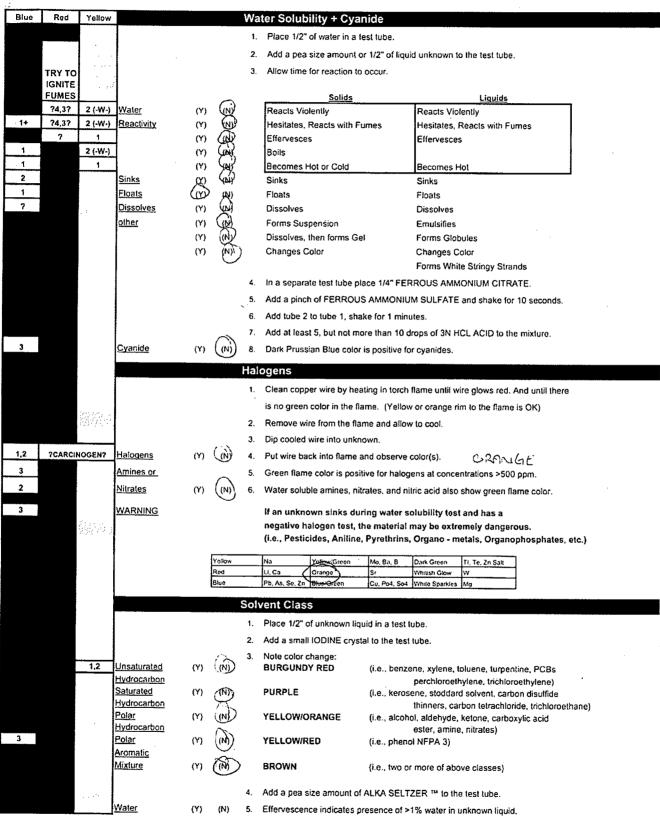
Nan-Flammabele \$XH= 5

NFPA MARKINGS

	Air Monitoring Headspace	Readings 0 - 6"	> 6"
%0 ₂	820,91	T T	
%LEL	D		Ì
FID			ì
PID[O		1
RAD	-	$\langle \rangle$	

	Blue	Red	Yellow				Ger	eral Reactivity	
		4	2	Pyrophoric	(Y)	((N))	1.	Place a pea size amount of solid or	dime size pool of liquid on a watch glass.
				Water		\bigcirc	2.	Wet pH test strip with 2-3 drops of v	water and touch to unknown.
			(-W-)	Reactivity	(Y)	(N)	З.	Strong reaction (heat, fumes, spittin	ng) indicates water reactive.
						\smile	4.	Compare colors on a test strip to co	plor chart. pH=
ġ		(ACID d	or ALK)	Corrosivity	())(A)	5.	pH=0,14 (NFPA 4): pH=1,2,12,13 (NFPA 3): pH=3.4.10.11 (NFPA 2): pH=5.6.8.9 (NFPA)
							6.	Wet POTASSIUM IODIDE test pap	er w/2-3 drops of 3N HCL ACID
						\sim	7.	Touch wetted paper to unknown.	
			(OX)	<u>Oxidizer</u>	(Y)	(1)	8.	Rapid paper color change to black,	purple, or blue/black indicates oxidizer
				lf Oxidizer	test is posit	ive, do p	oros	tide test (8A & 8B), otherwise proc	eed to step 9
							8a.	Solids - wet PEROXIDE test strip w	ith water and touch to unknown.
								Aqueous liquids - dip PEROXIDE te	est strip into unknown.
								Organic solvent- dip test strip in unl	mown, allow to dry, then wet w/water.
			1+	<u>Peroxide</u>	(Y)	(N)	8b.	Color change of test strip to blue ind	dicates peroxide.
							9.	Wet LEAD ACETATE test paper wit	Ih water.
			dingi di				10.	Hold paper over unknown while add	ling 5 drops of 3N HCL ACID to unknown.
	2			<u>Sulfide</u>	(Y)	(N)	11.	Color change of paper to brown/bla	ck is positive for sulfides.
							Sho	ck Sensitivity	
						-	1.	Place a few grains of solid or dime	size pool of liquid on a watch glass.
				Shock		<i>(</i>)	2.	Heat a hairpin until it is cherry red.	· · · · · ·
		3	4	<u>Sensitive</u>	(٣)		3.	Touch cherry red hairpin to unknow	n on a watch glass. VIOLENT REACTION!
		2	3		~m	(N)	4.	If no noticeable reaction, put hairpin	back in flame. FLAME!
		2	2	Reactive	m	(N)	5.	If there is still no reaction, add 3 dro	ps 3N HCL and repeat steps 3 & 4.
							-lan	nmability	
ļ	1,2			Volatile	V m	(N)	1.		r size pool of liquid on a watch glass.
					-		2.	Bring lit match from above unknown	· –
		4			(Y)			EXTREMELY FLAMMABLE = Flam	
		3	1.11.225	lanition	(Y)			FLAMMABLE = Flame jumps to unk	
		2	1874 Alta		(Y)	(M)		FLAMMABLE = Unknown continues	to burn after match is removed.
		1			-40	(N)		COMBUSTIBLE = Unknown burns v	with match as a wick.
		0			(m)	(N)		NON-FLAMMABLE = Liquids exting	uish match/solids do not burn.
				lfunknour					
				II DIIKIIOMII	is non-nam	mabie, p		eed to step 3, otherwise go to wate	-
							3.		r 1/2" of liquid unknown in a test tube.
							4. r		further reaction takes place/test tube begins to melt.
									smoke that is being driven out of test tube.
							6.	Indicators of organic compounds:	
				_	ŕ			Solids	Liquids
		1		Organic	(٣)/	(N))		Chairs with ignitable smoke	Evaporates with ignitable vapors
								Tars with ignitable smoke	Forms scales which char with ignitable vapors or smoke
								Sublimes with ignitable vapors	Evaporates, then chars or tars
									Liquid shoots out explosively

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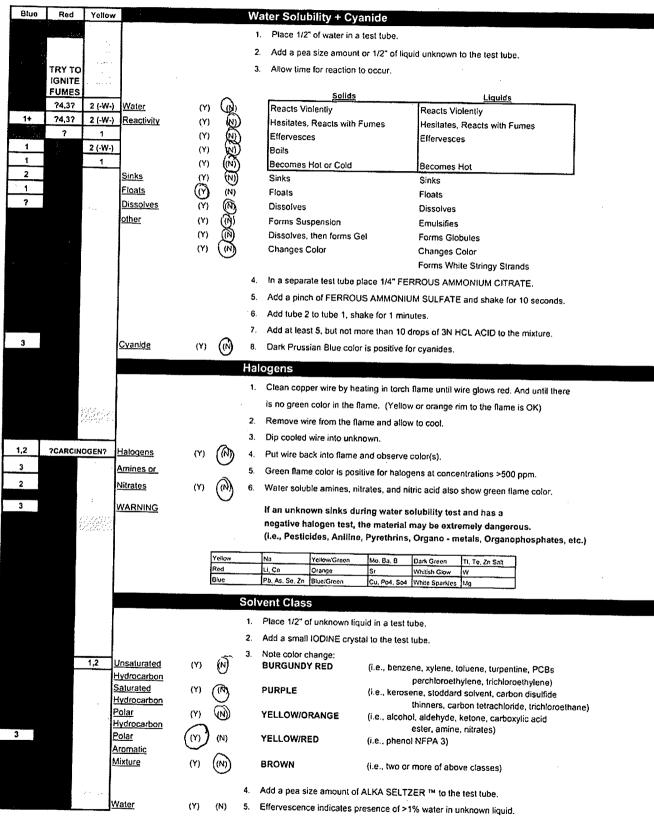


nonflammable polar aromatrc with layer of water

Name of Label Info								
JRP-DK-06								

	Air Monitoring	Readings	
	Headspace	0 - 6"	> 6"
%0 <u>,</u>	20.4		
%LEL[0		
FID			
PID	J.1		
RAD			

NFI	A MARK	INGS					·							
Blue	Red	Yellow	· .			Ge	neral Reactivity							
	4	2	Pyrophoric	(Y)	(N)	1,	Place a pea size amount of solid or dime size pool of liquid on a watch glass.							
			Water		Ŭ	2.	Wet pH test strip with 2-3 drops of water and touch to unknown.							
		(-W-)	Reactivity	(Y)	O	3.	Strong reaction (heat, fumes, spitting) indicates water reactive.							
					-	4.	Compare colors on a test strip to color chart. pH=6							
	(ACID	or ALK)	Corrosivity	(Y)	(\tilde{N})	5.	рН=0,14 (NFPA 4): pH=1,2,12,13 (NFPA 3): pH=3,4,10,11 (NFPA 2): pH=5,6,8,9 (NFPA 1)							
					\smile	6.	Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID							
						7.	Touch welled paper to unknown.							
		(OX)	<u>Oxidizer</u>	(Y)	(N)	8.	Rapid paper color change to black, purple, or blue/black indicates oxidizer							
			lf Oxidizer test	is positi	ve, do j	pero	ride test (8A & 8B), otherwise proceed to step 9							
						8a.	Solids - wet PEROXIDE test strip with water and touch to unknown.							
							Aqueous liquids - dip PEROXIDE test strip into unknown.							
					Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.									
		1+	Peroxide	(Y)	(N)	8b.	Color change of test strip to blue indicates peroxide.							
		titt ethered				9.	Wet LEAD ACETATE test paper with water.							
		astras				10.	Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown.							
2			Sulfide	(Y)	IN	11.	Color change of paper to brown/black is positive for sulfides.							
					\cup		ock Sensitivity							
			Shock			1.								
ſ	3	4	_	00	65	2.	Heat a hairpin until it is cherry red.							
	2	3	<u>Sensitive</u>	(Y)	\mathbb{R}	3.	Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! Slight origing e flame If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. fast birings arenge flam							
	2	2	Ponctivo	(Y)		4. c	If no noticeable reaction, put hairpin back in flame. FLAME! STITE of the store of							
	~	<u> </u>	Reactive	(Y)	(\mathbb{N})	5.	If there is suit no reaction, and 3 drops 3N HCL and repeat steps 3 & 4. TAST DVVND							
						Flar	nmability							
1,2			<u>Volatile</u>	(Y)	\mathbf{O}	1.	Place a few grains of solid or quarter size pool of liquid on a watch glass.							
						2.	Bring lit match from above unknown surface.							
	4			(Y)	(\mathbb{N})		EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown.							
	3	17 2 1	lanition	(Y)	0		FLAMMABLE = Flame jumps to unknown.							
	_2	d de la c		(Y)	0		FLAMMABLE = Unknown continues to burn after match is removed.							
				(Y)			COMBUSTIBLE = Unknown burns with match as a wick.							
	0			(Y)			NON-FLAMMABLE = Liquids extinguish match/solids do not burn.							
			lf unknown is n	ion-flam	nable, r	oroc	eed to step 3, otherwise go to water solubility							
							Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.							
						ы. Л								
							Heat test tube in torch flame until no further reaction takes place/test tube begins to melt.							
							While heating, try to ignite vapors or smoke that is being driven out of test tube.							
						6.	Indicators of organic compounds:							
			. .	\cap			Solids Liquids							
	· 1		Organic	(m)	(N)		Chairs with ignitable smoke Evaporates with ignitable vapors							
							Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke							
							Sublimes with ignitable vapors Evaporates, then-chars or tars							
7	~						Liquid shoots out explosively							



Organic han. flammable polar hydrocarbon-solvent

phenol

	Y
NFPA N	ARKINGS

Name of Label Info										
TRP.	DR -	07								
~ .										

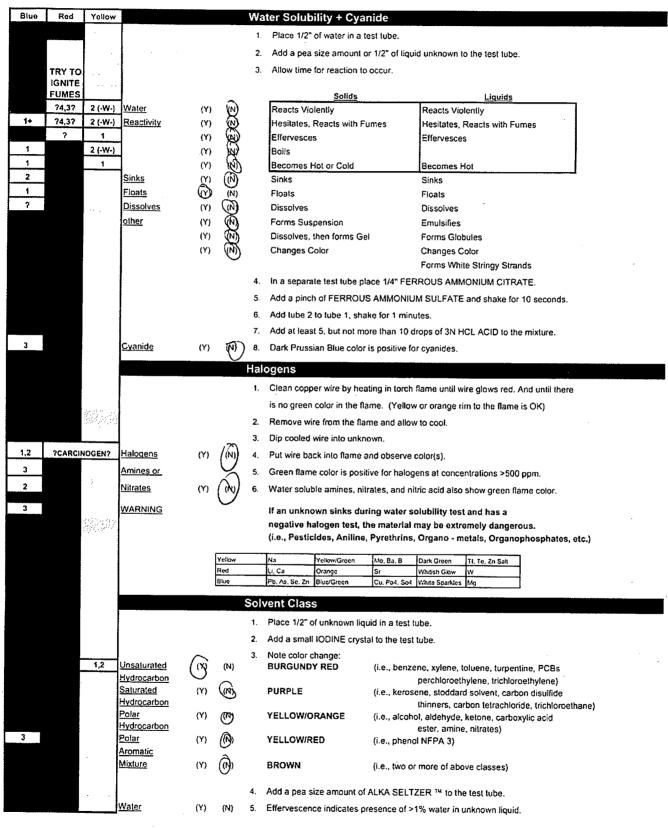
	Air Monitoring	Readings	
	Headspace	0 - 6"	> 6"
%02	2 "		
%LEL	ى		
FID	-		
PID	Ö		
RAD	~		

Blue	PA MARKI					Car	noral Popotivity					
Bille	Red	Yellow		110	0		neral Reactivity					
	4	2	Pyrophoric	(bh	$\langle n \rangle$	1.						
			Water		\wedge	2.						
		(-W-)	Reactivity	(Y)		3.	Strong reaction (heat, fumes, spitting) indicates water reactive.					
			-		~	4.						
	(ACID d	or ALK)	Corrosivity	(Y)	(ΔN)	5.	pH=0,14 (NFPA 4): pH=1,2,12,13 (NFPA 3): pH=3,4,10,11 (NFPA 2); pH=5,6,8,9 (NFPA 1)					
						6.	Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID					
					\bigcirc	7.	-					
		(OX)	Oxidizer	(Y)		8.	Rapid paper color change to black, purple, or blue/black indicates oxidizer					
			lf Oxidizer t	est is positi	ive, do p	pero	xide test (8A & 8B), otherwise proceed to step 9					
						8a.	Solids - wet PEROXIDE test strip with water and touch to unknown.					
							Aqueous liquids - dip PEROXIDE test strip into unknown.					
							Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.					
		1+	<u>Peroxide</u>	(Y)	(N)	8b.	Color change of test strip to blue indicates peroxide.					
		<u>COMA</u>				9.	Wet LEAD ACETATE test paper with water.					
		annean. T				10.	Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown.					
2			<u>Sulfide</u>	(Y)	(N)	11.	Color change of paper to brown/black is positive for sulfides.					
						Sho	ock Sensitivity					
						1.	Place a few grains of solid or dime size pool of liquid on a watch glass.					
			Shock			2.	Heat a hairpin until it is cherry red.					
	3	4	Sensitive	(Y)	(N)	3.	Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!					
	2	3		(C)	(N)	4.	If no noticeable reaction, put hairpin back in flame. FLAME!					
	2	2	Reactive	(Y)	(N)	5.	If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4.					
	:		Flammability									
1,2			Volatile	(Y)	(N)	1.						
1,2			Volatine	\$ (1)	(1)	2.	Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface.					
	4			(Y)	(N)	2.	EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown.					
	3		Ignition	(Y)	NN NN		FLAMMABLE = Flame jumps to unknown.					
	2		<u>National</u>	(Y)	(B)							
	1			•			FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick.					
	0			e contraction de la contractio) (N)							
				(m)) ((1)		NON-FLAMMABLE = Liquids extinguish match/solids do not burn.					
			lf unknown	is non-flam	mable, j	proc	eed to step 3, otherwise go to water solubility					
						З.	Place 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.					
		9.4				4.	Heat test tube in torch flame until no further reaction takes place/test tube begins to mett.					
						5.	While heating, try to ignite vapors or smoke that is being driven out of test tube.					
						6.	indicators of organic compounds:					
				~			Solids					
	1		Organic	(m)) (N)		Chairs with ignitable smoke Evaporates with ignitable vapors					
				\sim	/		Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke					
							•					
							Liquid shoots out explosively					

Blue	Red	Yellow				Wa	ter Solub	ility + Cyar	ide						
		•				1.		of water in a te							
•		5 E				2.		size amount or		d uakaawa k	a the test tube				
									-	u diskiidwii a	o nie test tube.				
	TRY TO					З.	Allow time	for reaction to	occur.						
	FUMES							Solids			Liquids				
	74,3?	2 (-W-)	Water	(Y)	(N)		Reacts Vio			Reacts Viol			1		
1+	74,3?	2 (-W-)	Reactivity	(Y)	(\mathbb{N})		Hesitates,	Reacts with Fu	mes	Hesitates, I	Reacts with Fu	mes			
	?	1		(Y)	(N)		Effervesce	5		Effervesces	5				
1		2 (-₩-)		(Y)	(MR		Boils								
1		1		(Y)	(N)	I	Becomes H	lot or Cold		Becomes H	lot				
2			<u>Sinks</u>	ja-	(N)		Sinks			Sinks					
1 7			Floats	(m)	(N)		Floats			Floats					
r		1111	<u>Dissolves</u>	(Y)			Dissolves			Dissolves					
		•••	<u>other</u>	(Y)	R		Forms Sus			Emulsifies					
				(Y)	\bigotimes			then forms Gel		Forms Glob					
				(Y)			Changes C	0101		Changes C					
								•			e Stringy Strar				
						4.	In a separa	te test tube pla	ce 1/4" FER	ROUS AMM	ONIUM CITR/	ATE.			
				10 seconds.											
						6,	Add tube 2	to tube 1, shal	e for 1 minu	tes.					
						7,									
3			<u>Cyanide</u>	(Y)	(N)	8.	Dark Prussi								
					$\underline{\circ}$		8. Dark Prussian Blue color is positive for cyanides. alogens								
						1.	1. Clean copper wire by heating in torch flame until wire glows red. And until there								
		Persona					is no green color in the flame. (Yellow or orange rim to the flame is OK)								
		E Carlo				2.	2. Remove wire from the flame and allow to cool.								
					0	3.	Dip cooled	wire into unkno	wл.						
1,2	?CARCIN	OGEN?	Halogens	(Y)	(N)	4.	Put wire bad	ck into flame a	nd observe c	alor(s).					
3			Amines or		<u> </u>	5.		e color is positi			ntrations >500	000			
2			Nitrates	(Y)	(n)	6.									
				(')	$\underline{\bigcirc}$	0.	Water Solut	le amines, nitr	ates, and nu	ne acie also	snow green na	ime color.			
,3			WARNING					wn sinks duri		-					
								logen test, th							
							(i.e., Pestic	ides, Aniline,	Pyrethrins,	Organo • m	etals, Organo	phosphates, o	itc.)		
				[Yellow.		Na	Yellow/Green	Mo, Ba, B	Dark Green	TI, Te, Zn Salt	1			
					Red		Li, Ca	Orange	Sr	Whitish Glow	w				
		[1	Biue		Pb. As. Se. Zn	Blue/Green	Cu. Po4, So4	White Sparkles	Mg				
						Solv	ent Class	;							
						1.	Place 1/2" o	f unknown liqu	id in a test tu	ibe.					
								IODINE crysta							
					~		Note color c	-							
		1,2	Unsaturated	(Y)	(N)		BURGUND		(i.e., benzer	ne, xylene, to	oluene, turpent	line, PCBs			
			Hydrocarbon		õ						ylene, trichlord				
	Saturated (Y) (N) Hydrocarbon						PURPLE				l solvent, carbo				
			Polar	(Y)	(N)		YELLOW/O	RANGE			bon tetrachlori ketone, carbox		iane)		
		1	Hydrocarbon		Ŷ					ester, amine		AND BOID			
3			Polar (<u>m</u>	(N)		YELLOW/R	ED	(i.e., phenol		,				
		1	Aromatic Mixture	\sim			DDOUR			-					
		ľ	TONUE	(Y)	${ em }$		BROWN		(i.e., two or	more of abo	ve classes)				
					~	4.	Add a pea si	ze amount of A	LKA SELTZ	ER M to the	test tubé				
			Nater	∞	à			e indicates pre							
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Ú			e meneroo pri			annowi ciiqdid.				

## Combustible Liquid Unsiderated hydrocarbon

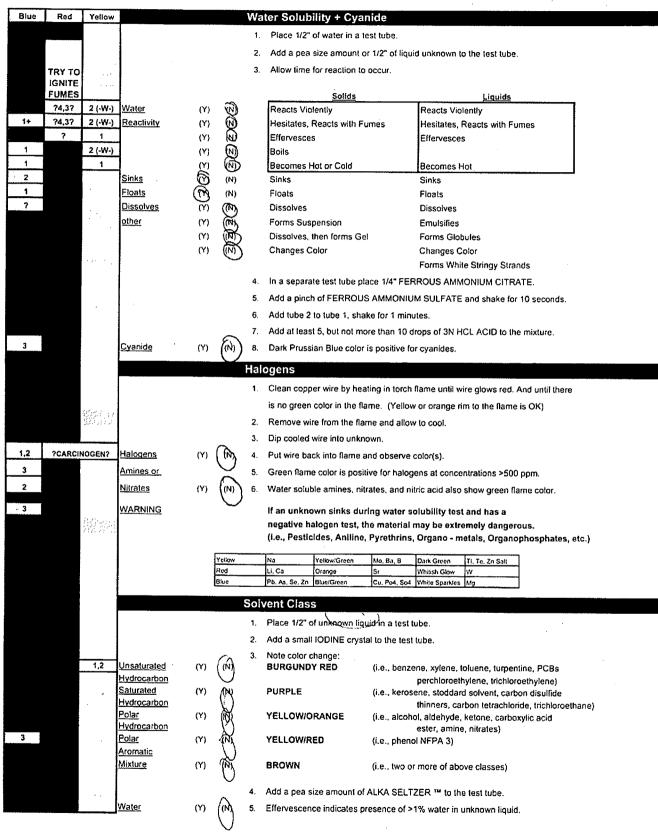
				Name	of Labo	alinfo	Air Monitoring Readings
	4				TRP.		Headspace 0-6" > 6" %02 20-1
4					·····		%LEL
							FID PID 177.6
	ς,	7		L			RAD
NF		INGS					
Blue	Red	Yellow				Gen	eral Reactivity
	4	2	Pyrophoric	(Y)	(N)		Place a pea size amount of solid or dime size pool of liquid on a watch glass.
			Water		$\smile$		Wet pH test strip with 2-3 drops of water and louch to unknown.
		{-W-}	Reactivity	(Y)	3		Strong reaction (heat, fumes, spitting) indicates water reactive.
					•		Compare colors on a test strip to color chart. pH=
	(ACID	or ALK)	Corrosivity	(Y)			pH=0.14 (NFPA 4): pH=1.2.12.13 (NFPA 3): pH=3.4.10.11 (NFPA 2): pH=5.6.8.9 (NFPA 1)
					0		Wel POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID
							Touch wetted paper to unknown.
		(OX)	Oxidizer	(Y)	(N)		Rapid paper color change to black, purple, or blue/black indicates oxidizer
			If Oxidizer tes		1 Y Y		de test (8A & 8B), otherwise proceed to step 9
				,	, ,		Solids - wet PEROXIDE test strip with water and touch to unknown.
							Aqueous liquids - dip PEROXIDE test strip into unknown,
							Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.
		1+	Peroxide	(Y)	(N)		
					(,		Color change of test strip to blue indicates peroxide.
							Net LEAD ACETATE test paper with water.
2			Sulfide	(Y)			Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown. Color change of paper to brown/black is positive for sulfides.
					$\bigcirc$		
			· · · ·				k Sensitivity
						1. 1	Place a few grains of solid or dime size pool of liquid on a watch glass.
			Shock		$\cap$		feat a hairpin until it is cherry red.
	3	4	<u>Sensitive</u>	(Y)			Fouch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION
	2	3		(Y)			f no noticeable reaction, put hairpin back in flame. FLAME! Orange flame
	2	2	Reactive	(Y)		5. I	f there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4.
						Flam	mability
,2			<u>Volatile</u>	(Y)		1. F	Place a few grains of solid or quarter size pool of liquid on a watch glass.
							Bring lit match from above unknown surface.
	4			$(\mathbf{r})$		E	XTREMELY FLAMMABLE = Flame jumps 2" or more to unknown.
	3	States a	Ignition	. (Y)	$(\mathbb{N})$	F	LAMMABLE = Flame jumps to unknown.
	2	Weiter er		Ŋ	$(\mathbf{N})$	F	LAMMABLE = Unknown continues to burn after match is removed.
	1			$\bigcirc$	(N)		OMBUSTIBLE = Unknown burns with match as a wick.
	0			(Y)	(N)	١	ION-FLAMMABLE = Liquids extinguish match/solids do not burn.
			lf unknown io w				
				ion-nam.	mable, j		d to step 3, otherwise go to water solubility
							lace 2 pea size amounts of solid or 1/2" of liquid unknown in a task tube
							lace 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.
						4. H	leat test tube in torch flame until no further reaction takes place/test tube begins to melt.
						4. H	
						4. H 5. V	leat test tube in torch flame until no further reaction takes place/test tube begins to melt.
				~		4. H 5. V	leat test tube in torch flame until no further reaction takes place/test tube begins to melt. Vhile heating, try to ignite vapors or smoke that is being driven out of test tube.
	1		Organic	(e)	(N)	4. H 5. V 6. Ir	leat test tube in torch flame until no further reaction takes place/test tube begins to melt. /hile heating, try to ignite vapors or smoke that is being driven out of test tube. ndicators of organic compounds:
	1			(B)	(N)	4. H 5. V 6. Ir C	leat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids Liquids hairs with ignitable smoke Evaporates with ignitable vapors
	1			Ô	(N)	4. H 5. V 6. Ir C	leat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids Liquids hairs with ignitable smoke Evaporates with ignitable vapors



Ç		>		Name J	of Labe	l info	-07	Air Monitoring Readings Headspace $0.6^{\circ} > 6^{\circ}$ %02 %LEL $()$ FID PID $().2^{\circ}$ RAD
NFP Blue	A MARH	· · · · · · · · · · · · · · · · · · ·	1			~		
BIUU	Red	Yellow			$\sim$		neral Reactivity	
	4	2	Pyrophoric	(Y)		1.		r dime size pool of liquid on a watch glass.
			Water		A	2.	Wet pH test strip with 2-3 drops of	
		(-₩-)	Reactivity	(Y)	(")	3.	Strong reaction (heat, fumes, spitting	ng) indicates water reactive.
			<b>.</b>		$\tilde{\frown}$	4.	Compare colors on a test strip to co	
	(ACID	or ALK)	Corrosivity	(Y)	$(\mathbb{N})$	5.	pH=0,14 (NFPA 4): pH=1,2,12,13 (	NFPA 3): pH=3,4,10,11 (NFPA 2): pH=5,6,8,9 (NFPA 1)
					-	6.	Wet POTASSIUM IODIDE test pap	er w/2-3 drops of 3N HCL ACID
			-		$\sim$	7.	Touch welted paper to unknown.	
		(OX)	Oxidizer	(Y)	(N)	8.	Rapid paper color change to black,	purple, or blue/black indicates oxidizer Change not mpro
			If Oxidizer tes	t is positi	ive, do j	bero	kide test (8A & 8B), otherwise proc	ceed to step 9
						8a.	Solids - wet PEROXIDE test strip w	vith water and touch to unknown.
							Aqueous liquids - dip PEROXIDE to	est strip into unknown.
			1				Organic solvent- dip test strip in unl	known, allow to dry, then wet w/water.
		1+	Peroxide	(Y)	(N)	8b.	Color change of test strip to blue in	dicates peroxide.
		Na tanàna dia kaominina dia				9.	Wet LEAD ACETATE test paper wi	th water,
		1011343382				10.	Hold paper over unknown while add	ding 5 drops of 3N HCL ACID to unknown.
2		,	<u>Sulfide</u>	(Y)	(N)	11,	Color change of paper to brown/bla	ck is positive for sulfides.
						Shc	ck Sensitivity	
						1,		
			Shock			2.	Place a few grains of solid or dime : Heat a hairpin until it is cherry red.	size poor of liquid on a watch glass.
	3	4	Sensitive	(Y)	(in)	3.	· · ·	n on a watch glass. VIOLENT REACTION!
	2	3		(Y)	X	4.	If no noticeable reaction, put hairpin	
	2	2	Reactive	(Y)	$\langle n \rangle$	5.	If there is still no reaction, add 3 dro	
1,2			Veletile				nmability	
<b></b>			<u>Volatile</u>	(Y)	$(\mathbb{N})$	1.		er size pool of liquid on a watch glass.
	4				$\bigcirc$	2.	Bring lit match from above unknown	
	4		lastina	(Y)			EXTREMELY FLAMMABLE = Flam	
	3		<u>Ignition</u>	(Y)	(M)		FLAMMABLE = Flame jumps to unk	
	2			(Y)	(B)		FLAMMABLE = Unknown continues	
-				(m)			COMBUSTIBLE = Unknown burns v	
	0			$\binom{(\gamma)}{\gamma}$	(N)		NON-FLAMMABLE = Liquids exting	uish match/solids do not burn.
			lf unknown is r	10n-flamr	nable, p	proce	eed to step 3, otherwise go to wate	ar solubility
								r 1/2" of liquid unknown in a test tube.
								o further reaction takes place/lest tube begins to melt.
						5.		smoke that is being driven out of test tube.
						6.	Indicators of organic compounds:	
	1		Ornanic	~~	2		<u>Solids</u>	
			<u>Organic</u>	(1)	$\bigcirc$		Chairs with ignitable smoke	Evaporates with ignitable vapors
							Tars with ignitable smoke	Forms scales which char with ignitable vapors or smoke
							Sublimes with ignitable vapors	Evaporates, then chars or tars
					-			Liquid shoots out explosively

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Solid nonflammable

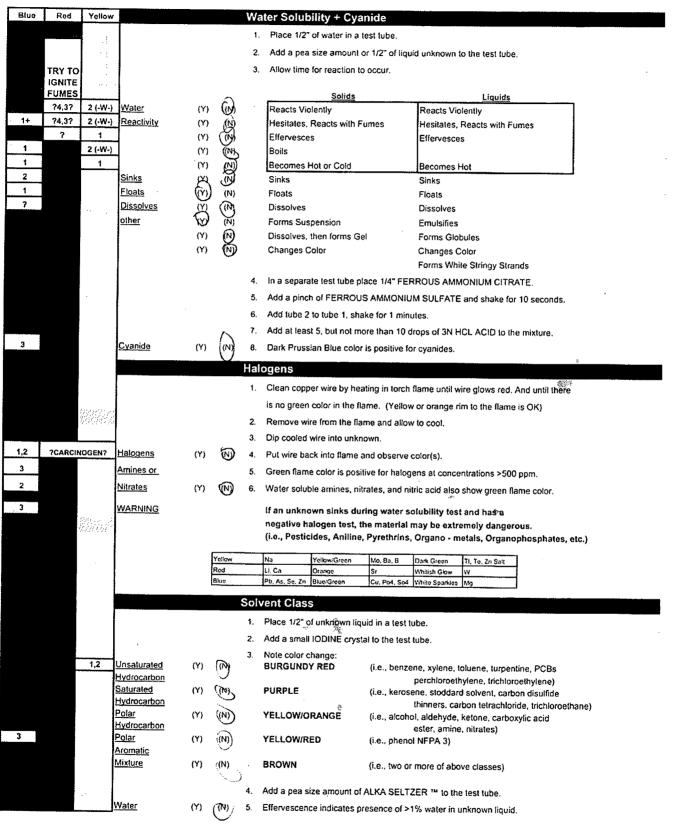


		015		L	IQUID/SOLID SCREENING DATA
			Name e	of Label Infi P - PR	- \Q%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02%02_%02
• •		• -		31291	%LEL         〇           FID            PID            RAD
	NFPA MARKINGS		bre	nun	01
•	Blue Red Yellow	,		Ge	neral Reactivity
•	4 2	Pyrophoric	(Y)	(N) 1.	Place a pea size amount of solid or dime size pool of liquid on a watch glass.
		Water		2.	
	(-W-)	Reactivity	(Y)	(N) 3.	Strong reaction (heat, fumes, spitting) indicates water reactive,
				4.	-
	(ACID or ALK)	Corrosivity	(Y)	(N) 5.	pH=0,14 (NFPA 4): pH=1,2,12,13 (NFPA 3): pH=3,4,10,11 (NFPA 2): pH=5,6,8,9 (NFPA 1)
				6.	Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID
		_		7.	Touch wetled paper to unknown.
	(OX)	Oxidizer	m /	(N) 8.	Rapid paper color change to black, purple or blue/black indicates oxidizer ー んって たのパ の; SPo TTT
	· · · · · · · · · · · · · · · · · · ·	lf Oxidizer test i	is positiv	e, do pero	xide test (8A & 8B), otherwise proceed to step 9
					Solids - wet PEROXIDE test strip with water and touch to unknown.
					Aqueous liquids - dip PEROXIDE test strip into unknown.
					Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.
	1+	Peroxide	(Y)	(N) 8b.	Color change of test strip to blue indicates peroxide.
	Sec.	7		9.	Wet LEAD ACETATE test paper with water.
	i seder and			10.	Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown.
4	2	Sulfide	(Y)	(N) 11.	Color change of paper to brown/black is positive for sulfides.
				She	ock Sensitivity
				0110	of other and the second s
				1.	
		Shock			Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red.
	3 4	Shock Sensilive	(Y)	1.	Place a few grains of solid or dime size pool of liquid on a watch glass.
	3 4 2 3	7		1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red.
		7	$(\mathfrak{M})$	1. 2. (N) 3. (N) 4.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!
	2 3	Sensitive	$(\mathfrak{M})$	1. 2. (N) 3. (N) 4. (N) 5.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME!
	2 3	Sensitive	(M) (Y)	1. 2. (N) 3. (N) 4. (N) 5. Flat	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. mmability
	2 3 2 2	<u>Sensitive</u> Reactive	(M) (Y)	1. 2. (N) 3. (N) 4. (N) 5. Flat	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4.
	2 3 2 2	<u>Sensitive</u> Reactive	(m) (m) (m)	1. 2. (N) 3. (N) 4. (N) 5. Flat (N) 1.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. mmability Place a few grains of solid or quarter size pool of liquid on a watch glass.
	2 3 2 2 1,2	<u>Sensitive</u> Reactive	(m) (m) (m)	1. 2. (N) 3. (N) 4. (N) 5. Flat (N) 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. mmability Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface.
	2 3 2 2 1,2 4	Sensitive Reactive Volatile	(M) (M) (M) (M) (M)	1. 2. (N) 4. (N) 5. Flat (N) 1. 2. (N) 2. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown.
	2 3 2 2 1.2 4 3	Sensitive Reactive Volatile	() () () () () () () () () () () () () (	1. 2. (N) 4. (N) 5. Flan (N) 2. (N) 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown. FLAMMABLE = Flame jumps to unknown.
	2 3 2 2 1,2 4 3 2	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m)	1. 2. 3. (N) 4. 5. Flat (N) 2. (N) 5. (N) 5. (N) 2. (N) 4. 5. (N) 4. (N) 5. (N) 5. (N) 7. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed.
	2 3 2 2 1.2 4 3 2 1	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. 3. (N) 4. 5. Flan (N) 2. (N) (N) 2. (N) (N) (N) 4. (N) 5. (N) 7. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn.
	2 3 2 2 1.2 4 3 2 1	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) (N) 5. (N) 5. (N) 5. (N) 5. (N) 5. (N) 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2" or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. KUMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn.
	2 3 2 2 1.2 4 3 2 1	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) (N) 5. (N) 5. (N) 5. (N) 5. (N) 5. (N) 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubliity Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube.
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flat (N) 2. (N) (N) 2. (N) (N) 3. (N) 3. (N) 3. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N) 5. (	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. <b>eed to step 3, otherwise go to water solublity</b> Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt.
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flat (N) 7. (N) 8. (N) 9. (N) 9. (N) 9. (N) 9. (N) 9. (N) 9. (N) 9. (N) 9. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N) 7. (N) 7.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubliity Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube.
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) 2. (N) 2. (N) 3. (N) 4. 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>mmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. RLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. <b>eed to step 3, otherwise go to water solubility</b> Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignile vapors or smoke that is being driven out of test tube. Indicators of organic compounds:
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Votatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) 2. (N) 2. (N) 3. (N) 4. 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>armability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. eed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating. try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: <u>Solids</u>
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Volatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) 2. (N) 2. (N) 3. (N) 4. 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass.         Heat a hairpin until it is cherry red.         Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!         If no noticeable reaction, put hairpin back in flame. FLAME!         If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>cmability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass.         Bring lit match from above unknown surface.         EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Liquids extinguish match as a wick.         NON-FLAMMABLE = Liquids extinguish match/solids do not burn.         eed to step 3, otherwise go to water solubility         Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube.         Heat test tube in torch flame until no further reaction takes place/test tube begins to mell.         While heating, try to ignite vapors or smoke that is being driven out of test tube.         Indicators of organic compounds:         Solids       Liquids         Chairs with ignitable smoke       Liquids
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Votatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) 2. (N) 2. (N) 3. (N) 4. 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass.         Heat a hairpin until it is cherry red.         Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!         If no noliceable reaction, put hairpin back in flame. FLAME!         If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4.         ormability         Place a few grains of solid or quarter size pool of liquid on a watch glass.         Bring lit match from above unknown surface.         EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Flame jumps to unknown.         FLAMMABLE = Unknown continues to burn after match is removed.         COMBUSTIBLE = Unknown burns with match as a wick.         NON-FLAMMABLE = Liquids extinguish match/solids do not burn.         eed to step 3, otherwise go to water solubility         Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube.         Heat test tube in torch flame until no further reaction takes place/test tube begins to melt.         While heating. try to ignite vapors or smoke that is being driven out of test tube.         Indicators of organic compounds:         Solids       Liquids         Chairs with ignitable smoke       Fevaporates with ignitable vapors or smoke
	2 3 2 2 1,2 4 3 2 1 0	Sensitive Reactive Votatile	(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	1. 2. (N) 4. (N) 5. Flar (N) 2. (N) 2. (N) 2. (N) 3. (N) 4. 5. (N) 5. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 4. (N) 5. (N)	Place a few grains of solid or dime size pool of liquid on a watch glass.         Heat a hairpin until it is cherry red.         Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!         If no noticeable reaction, put hairpin back in flame. FLAME!         If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>comability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass.         Bring lit match from above unknown surface.         EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Flame jumps 2° or more to unknown.         FLAMMABLE = Liquids extinguish match as a wick.         NON-FLAMMABLE = Liquids extinguish match/solids do not burn.         eed to step 3, otherwise go to water solubility         Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube.         Heat test tube in torch flame until no further reaction takes place/test tube begins to mell.         While heating, try to ignite vapors or smoke that is being driven out of test tube.         Indicators of organic compounds:         Solids       Liquids         Chairs with ignitable smoke       Liquids

Blue	Red	Yellow				W	ater Solubility + Cy	anide					
	·						1. Place 1/2" of water in a test tube.						
						2	Add a pea size amount	or 1/2" of liqui	d unknown to the test tube.				
	TRY TO					3	Allow time for reaction						
	FUMES				Ľ		Solids Liquids						
1+	<u>?4,3?</u>	2 (-W-)		(Y (Y	<u> </u>		Reacts Violently		Reacts Violently				
	74,37 ?	2 (-W-) 1	Reactivity	(Y)			Hesitates, Reacts with I	Fumes	Hesitates, Reacts with Fumes				
1							Effervesces Boils		Effervesces				
1		1	1	(Y)	~		Becomes Hot or Cold		Posomen Het				
2			<u>Sinks</u>	(Y)	-		Sinks		Becomes Hot Sinks				
1			Floats	Ø	Ň		Floats		Floats				
?		· · · .	<u>Dissolves</u>	(Y)			Dissolves		Dissolves				
			other	ାଷ	(N)		Forms Suspension		Emulsifies				
				(Y)	IN	;	Dissolves, then forms G	el	Forms Globules				
		·		(Y)	G		Changes Color		Changes Color				
						1 			Forms White Stringy Strands				
						4. 5. 6. 7.	In a separate test tube p	In a separate test tube place 1/4" FERROUS AMMONIUM CITRATE. Add a pinch of FERROUS AMMONIUM SULFATE and shake for 10 seconds.					
							Add a pinch of FERROL						
							Add tube 2 to tube 1, shake for 1 minutes.						
							Add at least 5, but not more than 10 drops of 3N HCL ACID to the mixture.						
3			<u>Cyanide</u>	(Y)		8.							
						Ha	logens						
						1,	Clean copper wire by he	atino in torch f	lame until wire glows red. And until there				
									or orange rim to the flame is OK)				
						2.	Remove wire from the fla		-				
						3.			10 0001.				
1,2	7CARCIN	OGEN?	Halogens	· (Y)	(m)		Dip cooled wire into unkr						
3			Amines or	(1)	U								
2						5.		is positive for halogens at concentrations >500 ppm.					
			Nitrates	(Y)	$\odot$	6.	Water scluble amines, nitrates, and nitric acid also show green flame color.						
3			WARNING				if an unknown sinks during water solubility test and has a						
							negative halogen test, t	he material m	ay be extremely dangerous.				
							(i.e., Pesticides, Aniline	, Pyrethrins, (	Organo - metals, Organophosphates, etc.)				
					Yellow		Na Yellow/Green	Mo, Ba, B	Dark Green TI, To, Zri Sati				
					Red Blue		Li, Ca Orange	Sr N	Whitish Glow 19				
		· ·					Pb. As. Se. Zn Blue/Green	Cu, Po4, So4	Mhile Spankes Mg				
		ļ				Sol	vent Class						
						1.							
						2.	Add a small IODINE cryst	al to the test to	ube.				
			<u>Insaturated</u>	(Y)	(E)	3.	Note color change: BURGUNDY RED		e, xylene, toluene, turpentine, PCBs				
			aturated lydrocarbon	(Y)	Ø		PURPLE	(i.e., kerosei	perchloroethylene, trichloroethylene) 1e, sloddard solvent, carbon disulfide				
		E	olar Ivdrocarbon	(Y)	$\odot$		YELLOW/ORANGE	(i.e., alcohol	hinners, carbon tetrachloride, trichloroethane) , aldehyde, ketone, carboxylic acid				
3		E	olar romatic	(Y)	Ø		YELLOW/RED	e (i.e., phenol	ister, amine, nitrates) NFPA 3)				
			lixture	O	(N)		BROWN	(i.e., two or r	nore of above classes)				
		[			•	.4.	Add a pea size amount of	ALKA SELTZI	ER TM to the test tube				
		<u></u> v	later	(Y)			Effervescence indicates p						

DR-11

				Namo	of Labo	l info	<b>`</b>			Alr Monitoring Headspace	g Readings 0 - 6"	> 6"	
				<b>S</b> r	P- D1	Į-	11		%0,	12.1	0-0	<u></u>	1
- <b>:                                   </b>				$\vdash$					%LEL FID	0			
					-517	ম	D		PID	·····			
	$\backslash$			1					RAD			L	ł.,
NFI		INGS		<b>O</b> r	own	<u></u> 1	51						
Blue	Red	Yellow				Ge	neral Reac	tivity					
	4	2	Pyrophoric	(Y)	(N))	1.	Place a pea	size amount of solid of	or dime size pool o	f liquid on a v	vatch glass.		
			Water		$\sim$	2.		strip with 2-3 drops of			•		
		(-W-)	Reactivity	(Y)	((N))	3.	Strong react	on (heat, fumes, spitt	ting) indicates wate	r reactive.			
			1		$\sim$	4.		ors on a test strip to o					
	(ACID	or ALK)	Corrosivity	(Y)	(N)	5.		PA 4): pH=1,2,12,13				.9 (NFPA 1)	
					-	6.		SIUM IODIDE test pa					
			4		-	7,		paper to unknown.	•				
		(OX)	Oxidizer	(Y)	$(\mathbb{N})$	8.	Rapid paper	color change to black	k, purple, or blue/bl	ack indicates	oxidizer		
			lf Oxidizer test is	s posit	ive, do p			k 8B), otherwise pro					
								EROXIDE test strip		to unknow	,		
								ids - dip PEROXIDE I					
r.								ent- dip test strip in ur			/water.		
		1+	Peroxide	(Y)	((N))	8b.		of test strip to blue in					
					$\bigcirc$	9.		CETATE test paper w	14				
			2 2 2			10.		ver unknown while ad		HCL ACID In	unknown '		
2			Sulfide	(Y)	$(\mathbf{w})$	11.		of paper to brown/bla					
							ck Sensitiv						
			Shock			1. 2.		rains of solid or dime		on a watch gl	ass.		
	3	4	Sensitive	(Y)	(N)	2. 3.		until it is cherry red.					
	2	3		(Y)		J. 4.		red hairpin to unknow			REACTION!		
	2	2	Reactive	(Y)	N	<b>-</b> . 5.		le reaction, put hairpi		•	• •		
			<u>م</u>	(.,	$\leq$			no reaction, add 3 dr	ops 3N HCL and re	epeat steps 3	& 4.		
							nmability						
1,2			Volalile	(Y)	(N)			ains of solid or quart		d on a watch	glass.		
					$\sim$	2.		from above unknow					
	4			(Y)	$(\underline{\mathbb{N}})$		EXTREMELY	FLAMMABLE = Flam	ne jumps 2" or mon	e to unknown			
	3		Ignition	(Y)	$(\mathbb{N})$			= Flame jumps to uni					
	2			(Y)	$\mathbb{N}$			= Unknown continue:			l, ¹		
				(Y)				E = Unknown burns					
	0		•	$\bigcirc$	Øn		NON-FLAMM	ABLE = Liquids exting	guish match/solids	do not burn.			
			lf unknown is nor	1-flamr	nable, p	roce	ed to step 3,	otherwise go to wate	er solubility				
								ze amounts of solid o		nown in a lest	tube		
		1.64						in torch flame until no				in mail	
								try to ignite vapors o				to men.	
								ganic compounds:		ng unven out	oi lest 1004.		
							Solids		17				
	1		Organic	m	(N)			itable smoke	<u>Liquids</u>				
		ľ			()		Chairs with ign		Evaporates with	-		-	
					$\overline{}$		Tars with ignita		Forms scales w			pors or smoke	*
							ocumes with	ignitable vapors	Evaporates, the				
									Liquid shoots o	ut explosively			



An	mt	R	2			LI	QUID/SOLID SCREENING DATA
Ÿ		T		Name	/Label I	nfo	Air Monitoring Readings Headspace 0 - 6" > 6"
ι.					RP-	UZ.	-12 %0, 70.9
		>			_51	291	
		Y				ı	RAD RAD
	$\sim$	/		2	an	lão	jurid
		1		0.0	~~ ~		
Blue	Red	Yellow			~		eral Reactivity
	4	2	Pyrophoric	(Y)	$^{\odot}$	1.	Place a pea size amount of solid or dime size pool of liquid on a watch glass.
		(-W-)	Water Reactivity	~~~	(a)	2.	Wet pH test strip with 2-3 drops of water and touch to unknown.
		(-1(-)	Heading	(Y)	$(\mathbb{N})$	3.	Strong reaction (heat, fumes, splitting) indicates water reactive.
	(ACID	or ALK)	Corrosivity	(Y)	Gai	4. 5.	Compare colors on a test strip to color chart. $pH=$ $\frac{Q}{2}$
	(MOID			(1)	(™)		pH=0.14 (NFPA 4): pH=1,2,12,13 (NFPA 3): pH=3,4,10,11 (NFPA 2): pH=5,6,8,9 (NFPA 1)
						6. 7.	Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID Touch wetted paper to unknown.
		(OX)	Oxidizer	(Y)	N	8.	
		(=,	1		9		Rapid paper color change to black, purple, or blue/black indicates oxidizer $\mu \sigma T Rafl D$ ide test (8A & 8B), otherwise proceed to step 9 $\sim 15$ s/c
				te poon			Solids - wel PEROXIDE test strip with water and touch to unknown.
						ομ.	Solids - wel PEROXIDE test strip with water and touch to unknown. Aqueous liquids - dip PEROXIDE test strip into unknown. $> 2m_{\chi}/1\mu_{\chi}$
							Organic solvent- dip test strip in unknown, allow to dry, then wet w/water.
		1+	Peroxide	(m)	) (N)	8b.	Color change of test strip to blue indicates peroxide.
				0			Wet LEAD ACETATE test paper with water.
					~		Hold paper over unknown while adding 5 drops of 3N HCL ACID to unknown.
2			Sulfide	(Y)	$(\mathbb{N})$		Color change of paper to brown/black is positive for sulfides.
			1				
						Sho	ck Sensitivity
						Sho	ck Sensitivity Place a few grains of solid or dime size pool of liquid on a watch class
			<u>Shock</u>	_		1.	<b>ck Sensitivity</b> Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red.
	3	4	<u>Shock</u> <u>Sensitive</u>	(Y)		1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass.
	3 2	43		(Y) (Y)	6	1. 2. 3.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red.
					6	1. 2. 3.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION!
	2	3	<u>Sensitive</u>	(Y)	BOS	1. 2. 3. 4. 5.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4.
1,2	2	3	<u>Sensitive</u>	(Y) (Y)		1. 2. 3. 4. 5. Flan	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4, mability
1,2	2	3	<u>Sensitive</u> <u>Reactive</u>	(Y)	BOS	1. 2. 3. 4. 5. Flan 1.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4, Imability Place a few grains of solid or quarter size pool of liquid on a watch glass.
1,2	2	3	<u>Sensitive</u> <u>Reactive</u>	(Y) (Y)		1. 2. 3. 4. 5. Flan 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. Imability Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface.
1,2	2 2	3	<u>Sensitive</u> <u>Reactive</u>	(Y) (Y) (Y)		1. 2. 3. 4. 5. Flan 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4, Imability Place a few grains of solid or quarter size pool of liquid on a watch glass.
1,2	2 2 4	3	<u>Sensilive</u> <u>Reactive</u> <u>Volatile</u>	(Y) (Y) (Y)		1. 2. 3. 4. 5. Flan 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. Imability Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2' or more to unknown.
1,2	2 2 4 3	3	<u>Sensilive</u> <u>Reactive</u> <u>Volatile</u>	(Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. Imability Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2* or more to unknown. FLAMMABLE = Flame jumps to unknown.
1,2	2 2 4 3 2	3	<u>Sensilive</u> <u>Reactive</u> <u>Volatile</u>	(Y) (Y) (Y) (Y) (Y) (Y)		1, 2, 3, 4, 5, <b>Flan</b> 1, 2,	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4, <b>Imability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2' or more to unknown. FLAMMABLE = Unknown continues to burn after match is removed.
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>Imability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn.
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. Flan 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3. If there is still no reaction quarter size pool of liquid on a watch glass. If LAMMABLE = Flame jumps 2' or more to unknown. If LAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. ed to step 3, otherwise go to water solubility
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>Imability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2* or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. <b>ed to step 3, otherwise go to water solubility</b> Place 2 pea size amounts of solid or 1/2* of liquid unknown in a test tube.
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. Flan 1. 2. proce 3. 4.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>Inability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2' or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. <b>et to step 3, otherwise go to water solubility</b> Place 2 pea size amounts of solid or 1/2' of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt.
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2. <b>Proce</b> 3. 4. 5.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>Imability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. <b>ed to step 3, otherwise go to water solubility</b> Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube.
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2. <b>Proce</b> 3. 4. 5.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. Imability Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2* or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. ed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2* of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds:
1,2	2 2 4 3 2 1 0	32	Sensitive Reactive Volatile Ignition	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2. <b>Proce</b> 3. 4. 5. 6.	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction above unknown surface. If the from above unknown surface. If the from above unknown surface. If the form above unknown is the match as a wick. If the still a unknown continues to burn after match is removed. If the step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids
1,2	2 2 4 3 2 1	32	Sensitive Reactive Volatile	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2. <b>9</b> <b>9</b> <b>9</b> <b>9</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>	Place a lew grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. ed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids Chairs with ignitable smoke Example the tube in torch flame until no further reaction takes place/test tube begins to melt.
1,2	2 2 4 3 2 1 0	32	Sensitive Reactive Volatile Ignition	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2. <b>9</b> <b>9</b> <b>9</b> <b>9</b> <b>9</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>2</b> <b>3</b> <b>3</b> <b>4</b> <b>5</b> <b>5</b> <b>5</b> <b>5</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>	Place a few grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. <b>Inability</b> Place a few grains of solid or quarter size pool of liquid on a watch glass. Bring lit match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2' or more to unknown. FLAMMABLE = Flame jumps 2' or more to unknown. FLAMMABLE = Flame jumps 2' or more to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. <b>ed to step 3, otherwise go to water solubility</b> Place 2 pea size amounts of solid or 1/2' of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to mell. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: <u>Solids</u> Chairs with ignitable smoke Tars with ignitable smoke Forms scales which char with ignitable vapors or smoke
1,2	2 2 4 3 2 1 0	32	Sensitive Reactive Volatile Ignition	(Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y) (Y)		1. 2. 3. 4. 5. <b>Flan</b> 1. 2. <b>9</b> <b>9</b> <b>9</b> <b>9</b> <b>9</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>2</b> <b>3</b> <b>3</b> <b>4</b> <b>5</b> <b>5</b> <b>5</b> <b>5</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>	Place a lew grains of solid or dime size pool of liquid on a watch glass. Heat a hairpin until it is cherry red. Touch cherry red hairpin to unknown on a watch glass. VIOLENT REACTION! If no noticeable reaction, put hairpin back in flame. FLAME! If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still no reaction, add 3 drops 3N HCL and repeat steps 3 & 4. If there is still match from above unknown surface. EXTREMELY FLAMMABLE = Flame jumps 2° or more to unknown. FLAMMABLE = Flame jumps to unknown. FLAMMABLE = Unknown continues to burn after match is removed. COMBUSTIBLE = Unknown burns with match as a wick. NON-FLAMMABLE = Liquids extinguish match/solids do not burn. ed to step 3, otherwise go to water solubility Place 2 pea size amounts of solid or 1/2° of liquid unknown in a test tube. Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube. Indicators of organic compounds: Solids Chairs with ignitable smoke Example the tube in torch flame until no further reaction takes place/test tube begins to melt.

Darm # 12

2

Blue	Red	Yellow				Wa	ter Solubility + Cya	nide					
	ه. <u>کرند</u> مربر			ł		1.	Place 1/2" of water in a						
						2.	Add a pea size amount	·					
	TRY TO					3.	Allow time for reaction t	·					
	IGNITE												
	FUMES	0 ( ) ( )	14/		t.		Solids		T	Liquids			
1+	?4,3? ?4,3?	2 (-W-) 2 (-W-)	Water Reactivity	(Y)			Reacts Violently	_	Reacts Vio	•			
14	?	1	neactivity	(Y) (Y)	E)E)		Hesilates, Reacts with F Effervesces	umes	Hesilates, Effervesce	Reacts with Fu	mes		
1		2 (-W-)	1	(Y)	<b>®</b>		Boils		chervesce	5			
1		1		(Y)	Ĩ		Becomes Hot or Cold		Becomes H	lot			
2			<u>Sinks</u>	(Y)			Sinks		Sinks				
1			Floats	$\odot$	(N)		Floats		Floats				
?			<u>Dissolves</u>	(Y)			Dissolves		Dissolves				
			<u>Olher</u>	(Y)	(N)		Forms Suspension		Emulsifies				
				(Y)	(N)		Dissolves, then forms G	el	Forms Glob	oules			
				(Y)	(0)		Changes Color		Changes C				
									Forms Whi	te Stringy Strar	nds		
						4, 5.	in a separate test tube place 1/4" FERROUS AMMONIUM CITRATE.				NTE.		
							Add a pinch of FERROL						
						6.	Add tube 2 to tube 1, sh						
						7.	Add at least 5, but not m						
3			Cyanide	(Y)	IND	8.	Dark Prussian Blue colo						
					0	Hald	ogens	-	•				
								- 1 ²	()				
	1. Clean copper wire by heating in torch flame until wire glows red. And until there												
						_	is no green color in the f			m to the flame	is OK)		
						2. Remove wire from the flame and allow to cool.							
					A	3. Dip cooled wire into unknown.							
1,2	?CARCIN	IOGEN?	<u>Halogens</u>	(Y)		<ol> <li>Put wire back into flame and observe color(s).</li> </ol>							
3			Amines or		$\sim$	5.	Green flame color is positive for halogens at concentrations >500 ppm.						
2			Nitrates	(Y)	$(\mathbb{N})$	6.	Water soluble amines, n	itrates, and ni	tric acid also	show green fla	ame color.		
3			WARNING				If an unknown sinks during water solubility test and has a						
				negative halogen test, the material may be extremely dangerous.									
							(i.e., Pesticides, Aniline, Pyrethrins, Organo - metals, Organophosphates, etc.)						
				ſ	Yellow		Na Yellow/Green	Mo. Ba, B	Dark Green	TI, Te, Zn Sall			
		ĺ			Rod		Li, Ca Orange	Sr	Whitish Glow	W			
				Į	Blue		Pb, As, Se, Zn Blue/Green	Cu, Po4, So4	White Sparkles	Mg			
					\$	Solv	ent Class				· · · · · · · · · · · · · · · · · · ·		
						2.	Add a small IODINE crys	tal to the test	lube.				
		1,2	Unsaturated	~~~	<i>(</i> )	3.	Note color change:						
			Hydrocarbon	(Y)	$\mathcal{O}$		BURGUNDY RED	(i.e., benze	-	oluene, turpeni			
		1	Saturated	(Y) (			PURPLE	(i.e., keros		nylene, trichloro d solvent, carb			
			Hydrocarbon		5				thinners, ca	rbon tetrachlori	de, trichloroeth	ane)	
		r	<u>Polar</u> Hydrocarbon	(Y)	(17)		YELLOW/ORANGE	(i.e., alcoh		kelone, carbox	cylic acid		
3				(Y)	(N)		YELLOW/RED	ester, amine, nitrates) (i.e., phenol NFPA 3)					
		E	Aromatic		$\overline{}$				,				
		1	<u>Mixture</u>	(1)	) (N)	E	BROWN (i.e., two or more of above classes)						
						4.	Add a pea size amount o			a tast lubo			
		l,	Nater	(Y) (	$(\mathbf{x})$		Effervescence indicates p						
			<u></u>	,	منهنه	<b>.</b>	Encirescence moloales	nesence UI >		unknown liquid			

DRUM 13

				Name	/Label In	nto		Air Monitoring Readings _ Headspace 0 - 6" > 6"						
				JK	P-6	2 <u>4</u>	-13		%0 ₂	20.9				
					512	910	27-		%LEL PID	0		<u> </u>		
									RAD					
						11	iquid	i				<u> </u>		
NFF	PA MARKI	NGS		`J'										
Blue	Red	Yellow				Ge	neral Reac	tivity						
	4	2	Pyrophoric	(Y)	(N)	1.	Place a pea	size amount of solid	d or dime size pool	of liquid on a	watch glass.			
			Water			2.	Wet pH test	strip with 2-3 drops	of water and touch	to unknown.				
		(-W-)	Reactivity	(Y)	((N))	3.	Strong react	ion (heat, fumes, sp	pitting) indicates wat	er reactive.				
			-		$\sim$	4.	Compare co	fors on a test strip to	o color chart. pH≖_	<u> </u>				
	(ACID o	or ALK)	Corrosivity	(Y)	$(\mathbb{N})$	5.	pH=0,14 (NI	PA 4): pH=1,2,12,1	3 (NFPA 3): pH=3,4	4,10,11 (NFP/	4 2): pH=5.6.8	,9 (NFPA 1)		
					$\mathbf{\tilde{\mathbf{v}}}$	6.	Wet POTASSIUM IODIDE test paper w/2-3 drops of 3N HCL ACID							
		·	]			7.	Touch wette	d paper to unknown	I.	•				
		(OX)	<u>Oxidizer</u>	(Y)	(N)	8.	Rapid paper	color change to bla	ck. purple, or blue/b	lack indicates	s oxidizer			
			If Oxidizer test i	s posit	ive, do j	pero	xide test (8A	vide test (8A & 8B), otherwise proceed to step 9						
			· · ·			8a.	Solids - wet PEROXIDE test strip with water and touch to unknown.							
							Aqueous liqu							
							Organic solv	ent- dip test strip in	unknown, allow to c	Jry, then wet v	v/water.			
		1+	Peroxide	(Y)	(N)	8b.	Color chang	e of lest strip to blue	indicates peroxide	).				
					$\bigcirc$	9.	Wet LEAD A	CETATE test paper	with water.					
					2	10.	Hold paper o	ver unknown white a	adding 5 drops of 3	N HCL ACID	o unknown.			
2			<u>Sulfide</u>	(Y)	(N)			e of paper to brown/						
						Sho	ock Sensiti	vity						
					1. Place a few grains of solid or dime size pool of liquid on a watch glass.									
_			Shock			2.		n until it is cherry re						
	3	4	Sensitive	(¥)	(N)	З.	Touch cherry	red hairpin to unkn	own on a watch gla	ss. VIOLENT	REACTION			
	2	3		(Y)	(NY)	4.		ole reaction, put hair						
	2	2	<u>Reactive</u>	(Y)	(D)	5.	If there is stil	no reaction, add 3	drops 3N HCL and	repeat steps 3	38.4.			
						Flar	nmability							
1,2			Volatile	(Y)	(N)	1.	Place a few g	grains of solid or qua	arter size pool of liqu	uid on a watch	glass.			
						2.		h from above unkno			5			
	4			(Y)			EXTREMELY	FLAMMABLE = FI	ame jumps 2" or mo	pre to unknow	n.			
	3		Ignition	(Y)	$\mathbf{6}$		FLAMMABLE	= Flame jumps to u	unknown.					
	2			(Y)			FLAMMABLE	= Unknown continu	ues to burn after ma	Itch is remove	d.			
	_1			(Y)			COMBUSTIE	LE = Unknown burn	is with match as a v	vick.				
	0							MABLE = Liquids extinguish match/solids do not bum.						
			lf unknown is no	n-flam	mable c	aroce	ed to stan 3	otherwise go to w	stor colubility					
										1				
								ace 2 pea size amounts of solid or 1/2" of liquid unknown in a test tube.						
							Heat test tube in torch flame until no further reaction takes place/test tube begins to melt. While heating, try to ignite vapors or smoke that is being driven out of test tube.							
										eing driven ou	t of test tube.			
				-		6.	mulcators of (	organic compounds:						
			<b>-</b>		)		Solids		Liquids					
	1	4	Organic	YOU	(N)			nitable smoke	Evaporates w	ith ignitable v	apors	>		
							Tars with igni	able smoke	Forms scales	which char w	ith ignitable va	apors or smoke	1	
							Sublimes with	ignitable vapors	Evaporates, ti	hen chars or t	ars			
									Liquid shoots	out explosive	ly			

# prom #13

	Blue	Red	Yellow				Wa	ter Solub	ility + Cyar	nide					
							1.		of water in a te						
•															
;							2.		size amount o		a unknown to	the lest tube			
1		TRY TO					3. Allow time for reaction to occur.								
		FUMES							Solids			Liquids			
		74,37	2 (-W-)	Water	(Y)	(IN)		Reacts Vic			Reacts Viol			<b>1</b>	
	1+	?4,3?	2 (-W-)	<b>Reactivity</b>	(Y)	Ę.		1	Reacts with Fu	mes	1	Peacts with Fi	umes		
		?	1		(Y)	Ś		Effervesce	s		Effervesces	:			
	1		2 (-W-)		(Y)	(9)(9)		Boils							
	1		1		(Y)	Ø		Becomes I	Hot or Cold		Becomes H	ot		]	
	2			Sinks	(Y)	$\mathbb{T}$		Sinks			Sinks				
	1 7			<u>Floats</u>		(N)		Floats			Floats				
	•			<u>Dissolves</u>	(Y)			Dissolves			Dissolves				
				<u>other</u>	_	(N)		Forms Sus	•		Emulsilies				
					(Y) (Y)	$(\mathcal{P})$			then forms Ge		Forms Glob				
					(1)	W		Changes Color			Changes Co		eda .		
							,	Forms White Stringy Strands							
							4.	In a separate test tube place 1/4" FERROUS AMMONIUM CITRATE.							
							5.	Add a pinch of FERROUS AMMONIUM SULFATE and shake for 10 seconds.							
							6.	Add tube 2 to tube 1, shake for 1 minutes.							
						$\sim$	7.	Add at least 5, but not more than 10 drops of 3N HCL ACID to the mixture.							
	3			Cyanide	(Y)	(IN)	8.	Dark Prussian Blue color is positive for cyanides.							
							Halo	ogens							
							Clean copper wire by heating in torch flame until wire glows red. And until there								
							2.	is no green color in the flame. (Yellow or orange rim to the flame is OK) Remove wire from the flame and allow to cool.							
							3.								
Γ	1,2	?CARCIN	OGEN2	Halogens		$\widehat{\mathbb{W}}$									
f	3	10411011			(Y)		4.								
ł	2			<u>Amines or</u>		6		Green flame color is positive for halogens at concentrations >500 ppm. Water soluble amines, nitrates, and nitric acid also show green flame color.							
	2			Nitrates	(Y)		6.	Water solut	ole amines, nitr	ales, and nit	ric acid also	show green II	ame color.		
	3			WARNING					wn sinks duri						
										he material may be extremely dangerous. , Pyrethrins, Organo - metals, Organophosphates, etc.)					
								(I.e., Pestic	ides, Aniline,	Pyrethrins,	Organo - me	tals, Organo	phosphates,	etc.)	
						Yellow		Na	Yellow/Green	Mo. Ba. B	Dark Green	TI, To, Zn Salt	]		
						Red Blue		Ll. Ca Pb. As. Se. Zn	Orange Rive/Creen		Whitish Glow White Sparkles	w			
											ттав зражез ]	ng	]		
							Solv	ent Class	S						
							1.	Place 1/2* c	f unknown liqu	id in a test tu	ube.				
							3.	Add a small IODINE crystal to the test tube.							
		-	1,2	Incaturated				Note color change:							
				Unsaturated (Y) Hydrocarbon		$(\mathbb{N})$		BURGUND	T REU		-	luene, turpen			
				Saturated	(Y)	(Ter)		PURPLE		ie., kerosene, stoddard solvent, carbon disulfide					
			-	Hydrocarbon Dolor	bon					•	thinners, cart	oon tetrachlor	ide, trichloroel	lhane)	
Polar (Y) Hydrocarbon			(NU)		YELLOW/O	RANGE	(i.e., alcohol, aldehyde, ketone, carboxylic acid ester, amine, nitrates)								
	3			Polar	(Y)	(W)		YELLOW/R	ED	(i.e., phenol		natates)			
			17	Aromatic Aisture	0										
			ľ	<u>Mixture</u>	(W)	(N)		BROWN		(i.e., two or	more of abov	e classes)			
						_	4.	Add a pea s	ize amount of /	ALKA SELTZ	ER ™ to the	test tube			
			V	Vater	(Y) (	IN			ce indicates pr				1		