

AP - 020

**STAGE 1 & 2
WORKPLANS**

DATE:

MAY 2003

RECEIVED

WFO

May 15 2003

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

MNA ENTERPRISES, LTD.

W.F. HANAGAN

ABATEMENT PLAN AP-20

MAY 2003

May 12, 2003

Bill Olson
NMOCD Environmental
Box 6429
1220 S. Saint Francis Drive
Santa Fe, NM 87504

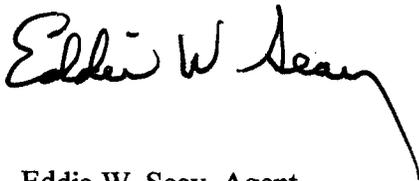
RE: MNA Enterprises, Ltd.
Stage 1 Abatement (AP-20)
W. F. Hanagan

Mr. Olson:

Contained within is information concerning the work performed as per the Abatement Plan. Also, we are making recommendation for final closure. We hope this will finalize MNA's obligation to this site.

If you have any questions or need additional information, please call.

Sincerely,



Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236

cc: MNA
Clay Osborn

AP-20

SUMMARY

The Hanagan site is located in the SE 1/4 of SW 1/4 of Section 12, Tws. 25 S., Rng. 36 E., Northwest of Jal, NM in Lea County (Osborn Ranch). a topographical map and oil and gas map is attached.

The abatement was due to a leak in a SWD line, which allowed salt water to run into the surface and into the ground. The investigation was to determine the impact to the groundwater and the surface soils, and to make recommendations for clean up.

INVESTIGATION

MNA's task was to advance to soil borings, one upgradient, and one at the site where groundwater was once encountered by EPI in a field investigation. If groundwater was found at this 20 to 25 ft. depth, a two inch monitor well would be placed for future monitoring.

The first boring, MNA's #1, was placed approximately twelve feet south southeast of the EPI boring. The hole was advanced to a total depth of 27 ft. Samples were taken every five feet starting at surface. The boring was dry down to TD. A copy of bore log attached.

The hole was plugged with bentonite and cuttings. Sampling was done with a core barrel and deconed between samples. Sampling:

1-1	surface sample	-	chloride
1-2	5 to 7 ft.	-	chloride
1-3	10 to 12 ft.	-	chloride, TPH, BTEX
1-4	15 to 17 ft.	-	chloride
1-5	20 to 22 ft.	-	chloride
1-6	25 to 27 ft.	-	chloride, TPH, BTEX

Soil boring MNA #2 was moved from the original upgradient location to 75 ft. SSE of MNA #1. (This was discussed with Mr. Olson with OCD). The placement for this boring was to see if the water had migrated further down gradient in the site. The boring was advanced with a rotary drilling rig, taking samples every five feet with a core barrel. This hole was advanced to 27 ft., but in talking to Mr. Olson, it was decided to drill down deeper. The hole was advanced to 50 ft. redbed clay was encountered at approximately 40 ft. The hole was dry and no ground water is present. Copy of log attached. The hole was plugged using bentonite and cuttings. Sampling:

2-1	surface	-	chloride
2-2	5 to 7 ft.	-	chloride
2-3	10 to 12 ft.	-	chloride, TPH, BTEX
2-4	15 to 17 ft.	-	chloride
2-5	20 to 22 ft.	-	chloride
2-6	25 to 27 ft.	-	chloride, TPH, BTEX
2-7	40 to 42 ft.	-	chloride
	TD 50 ft.		

RECOMMENDATIONS

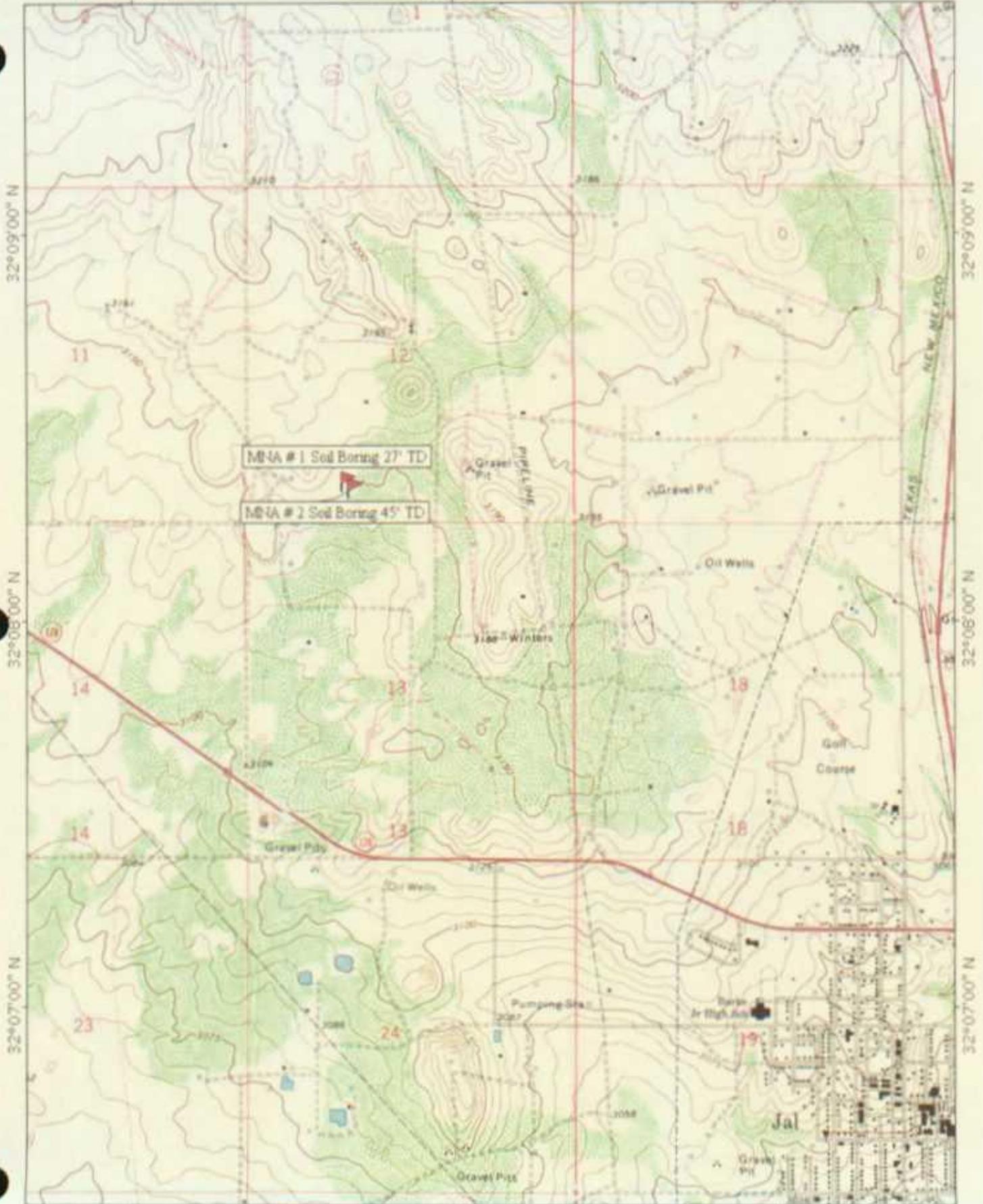
Since no groundwater was found, and the analytical showed no TPH or BTEX, it is my recommendation to remove another two feet of surface soil, replace the area with clean soil from a source Mr. Osborn requires, mound it over and clear location.

TOPOI map printed on 04/30/03 from "New Mexico.tpo" and "Untitled.tpg"

103°14'00" W

103°13'00" W

WGS84 103°12'00" W



103°14'00" W

103°13'00" W

WGS84 103°12'00" W



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PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
EDDIE SEAY CONSULTING
ATTN: EDDIE SEAY
601 W. ILLINOIS
HOBBS, NM 88242
FAX TO: (505) 392-6949

Receiving Date: 04/25/03
Reporting Date: 04/28/03
Project Owner: D. ALEXANDER
Project Name: MNA-HANAGAN
Project Location: OSBORN RANCH-JAL, NM

Analysis Date: 04/28/03
Sampling Date: 04/24/03
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H7619-1	MNA 1-1	992
H7619-2	MNA 1-2	528
H7619-3	MNA 1-3	432
H7619-4	MNA 1-4	432
H7619-5	MNA 1-5	480
H7619-6	MNA 1-6	208
H7619-7*	MNA 2-1	400
H7619-8	MNA 2-2	896
H7619-9	MNA 2-3	416
H7619-10	MNA 2-4	576
H7619-11	MNA 2-5	400
H7619-12	MNA 2-6	400
H7619-13*	MNA 2-7	200
Quality Control		1030
True Value QC		1000
% Recovery		103
Relative Percent Difference		2.0

METHOD: Standard Methods 4500-ClB

Note: Analyses performed on 1:4 w:v aqueous extracts.

*Matrix interference (color) observed.

Amy Hill
Chemist

4/28/03
Date



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Receiving Date: 04/25/03
 Reporting Date: 04/29/03
 Project Owner: D. ALEXANDER
 Project Name: MNA-HANAGAN
 Project Location: OSBORN RANCH-JAL, NM

Sampling Date: 04/24-04/25/03
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: AH
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		04/28/03	04/28/03	04/28/03	04/28/03	04/28/03	04/28/03
H7619-3	MNA 1-3	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7619-6	MNA 1-6	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7619-9	MNA 2-3	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7619-12	MNA 2-6	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Control		797	793	0.103	0.100	0.104	0.297
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		99.6	99.1	103	100	104	98.9
Relative Percent Difference		2.5	4.0	0.3	4.8	2.3	2.5

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.

Burgess A. Cooke
 Burgess A. Cooke, Ph. D.

4/29/03
 Date

H7619A.XLS

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Eddie's Safety Consulting
Project Manager: Eddie's Safety Consulting

Address: 601 W Illinois State: NM zip: 88242

City: Abilene Phone #: 2-2234 Fax #: 2-6949

Project #: MNA Project Owner: D. Alexander

Project Name: MNA - Managan State: NM City: Abilene

Project Location: Osborn Ranch - Sal N.M. Phone #: 212

Sampler Name: Eddie's Safety Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RABOR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :			
H7019-1	MNA 1-1		1							4/24	11:10	BTEX
-3	MNA 1-2		1							"	11:30	TPH (8015)
-3	MNA 1-3		2							"	11:45	Chloride
-4	MNA 1-4		1							"	11:55	
-5	MNA 1-5		1							"	12:15	
-6	MNA 1-6		2							"	12:30	
-7	MNA 2-1		1							"	12:55	
-8	MNA 2-2		1							"	1:10	

PLEASE NOTE: Liability and Damages: Cardholder's liability and insurer's exclusive remedy for any claim arising under this contract or tort shall be limited to the amount paid by the client for the services. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Sampler Relinquished: Eddie's Safety Date: 4/25 Received By: Amey B...
Time: 3:00

Relinquished By: Eddie's Safety Date: 4/25 Received By: Amey B...
Time: 3:00

Delivered By: (Circle One) UPS Bus Other Sample Condition: COOL HEAT OTHER CHECKED BY: Amey B... (Initials)

Phone Result: Yes No Add'l Phone #: _____
Fax Result: Yes No Add'l Fax #: _____
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

Company Drilled for: MNA		<h1>Drilling Log</h1>			
Location: UNIT N SEC. 12, T25S, R36E GPS - 32° 08' 22" N 103° 13' 20" W					
Method: AIR ROTARY	Depth of Boring: 27'	Well/Bore Number: # MNA-SB #1	Date Drilled: 4-24-03	Driller: A. Hodge	Logged By: A. Hodge
Bore Diameter: 4 3/4"	Casing Diameter: NA	Depth of Well: NA	Length of Casing: NA	Length of Screen: NA	
		Screen Diameter: NA	Slot Size: NA	Well Material: NA	

Depth	Lithology	Sample Type	DVA (PPM)	Remarks	Well Design	Depth
0	Red Brown Top Soil	SURFACE SAMPLE		SAMPLING WAS ON 5' CENTERS WITH A SPLIT SPOON		0
5	White Caliche	5' - S.S.				5
10	Red Sand	10' - S.S.				10
15	Yellow Clay with about 50% sand	15' - S.S.				15
20	Yellow Brown Clay	20' - S.S.				20
25	TD @ 27'	25' - S.S.		SOIL BORING WAS PLUGGED BACK WITH BENTONITE	25	
30					30	
35					35	
40					40	
45					45	
50					50	
55					55	
60					60	
65					65	
70					70	
75				75		
80				80		
85				85		
90				90		
95				95		
100				100		
105				105		

Company Drilled for:

MNA

Drilling Log

Location: UNIT N SEC. 12, T25S, R36E

GPS - 32° 08' 22" N
103° 13' 19" W

Well/Bore Number: MNA-SB #2

Date Drilled: 4-24-03

Driller: A. Hodge

Logged By: A. Hodge

Method: AIR ROTARY

Depth of Boring: 45'

Depth of Well: NA

Length of Casing: NA

Length of Screen: NA

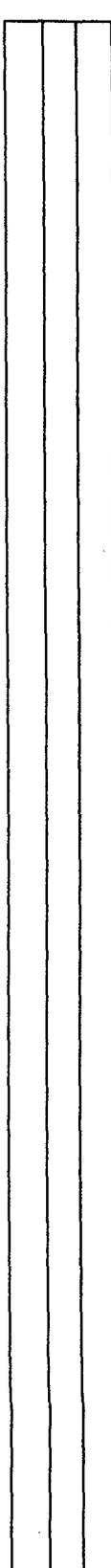
Bore Diameter: 4 3/4"

Casing Diameter: NA

Screen Diameter: NA

Slot Size: NA

Well Material: NA

Depth	Uthology	Sample Type	DVA (PPM)	Remarks	Well Design	Depth
0	RED BROWN TOP SOIL	SURFACE SAMPLE		SAMPLING WAS ON 5' CENTERS WITH A SPLIT SPOON		0
5	WHITE/PINK CALICHE	-5' - S.S.				5
10	YELLOW CLAY WITH ABOUT 50% SAND	-10' - S.S.				10
15		-15' - S.S.				15
20		-20' - S.S.				20
25	YELLOW CLAY	-25' - S.S.			25	
30		-30' - S.S.			30	
35	BROWN CLAY	-35' - S.S.			35	
40	RED SHAL/ RED BED	-40' - S.S.		SOIL BORING WAS PLUGGED BACK WITH BENTONITE		40
45	TD @ 45'	-45' - S.S.				45
50						50
55					55	
60					60	
65					65	
70					70	
75					75	
80					80	
85					85	
90					90	
95					95	
100					100	
105					105	

PHOENIX
ENVIRONMENTAL L.L.C.
P.O. Box 1856
2113 French Dr.
Hobbs, NM 88240
Office 505-392-9545
Fax 505-392-9376



Tailgate Safety Meeting

Date: 4-24-03 Company: MNA
 Wind Direction: SW Weather Conditions: CLEAR Temperature: 85°
 Location: SEC. 12-T255-R3⁴² Type of Work Performed: SOIL BORING / MONITOR WELL
 Type Of Work: Routine Non-Routine
 Number Of Employees: 3 Phoenix 1 Contractor
 Initial Safety Orientation Required: Yes No
 List the Personal Protective Equipment For This Job: HARD HAT, STEEL TOE BOOTS,
HEARING PROTEC., SAFETY GLASSES & WORK GLOVES

Possible Hazards: OVERHEAD ROTATING EQ., TRIP HAZ. HEATS & SNAKES

Precautions Required To Do This Job Safely: Buddy System

Sign Your Name and Company:

Print Name	Sign Name	Company
Eddie Seay	<i>Eddie Seay</i>	Eddie Seay Consulting
ALLEN Hodge	<i>Allen Hodge</i>	Phoenix Env.
Michael Seay	<i>Michael Seay</i>	Phoenix Env.
Henry Slope	<i>Henry W Slope</i>	Phoenix Env.

PHOENIX ENVIRONMENTAL LLC
 P.O. Box 1856
 2113 French Dr.
 Hobbs, NM 88240
 Office 505-392-9545
 Fax 505-392-9376



Tailgate Safety Meeting

Date: 4-25-03 Company: MNA / Osborn
 Wind Direction: S Weather Conditions: clear Temperature: 85°
 Location: Sec. B TRSS R362 Type of Work Performed: SOIL BORING / MAJOR WELL

Type Of Work: Routine Non-Routine

Number Of Employees: 3 Phoenix 1 Contractor

Initial Safety Orientation Required: Yes No

List the Personal Protective Equipment For This Job: HARD HAT, STEEL TOE BOOTS, HEARING PROTEC., SAFETY GLASSES + WORK GLOVES

Possible Hazards: OVERHEAD ROTATING EQ., TRIP HAZ., HEAT + SNAKES

Precautions Required To Do This Job Safely: Buddy SYSTEM

Sign Your Name and Company:

Print Name	Sign Name	Company
Eddie Seay	<i>Eddie Seay</i>	Eddie Seay Consultant
ALLAN HODGE	<i>ALLAN H</i>	PHOENIX ENV.
Michael Seay	<i>Michael Seay</i>	PHOENIX ENV.
Henry Slope	<i>Henry W Slope</i>	PHOENIX ENV

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