

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

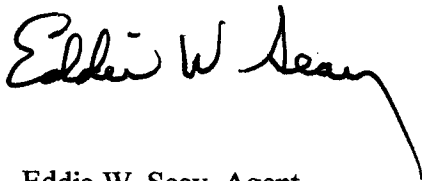
RE: MNA Enterprises, Ltd.
Stage 1 Abatement (AP-20)
W. F. Hanagan

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,

A handwritten signature in black ink, appearing to read "Eddie W. Seay". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

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

cc: MNA
Clay Osborn

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.			

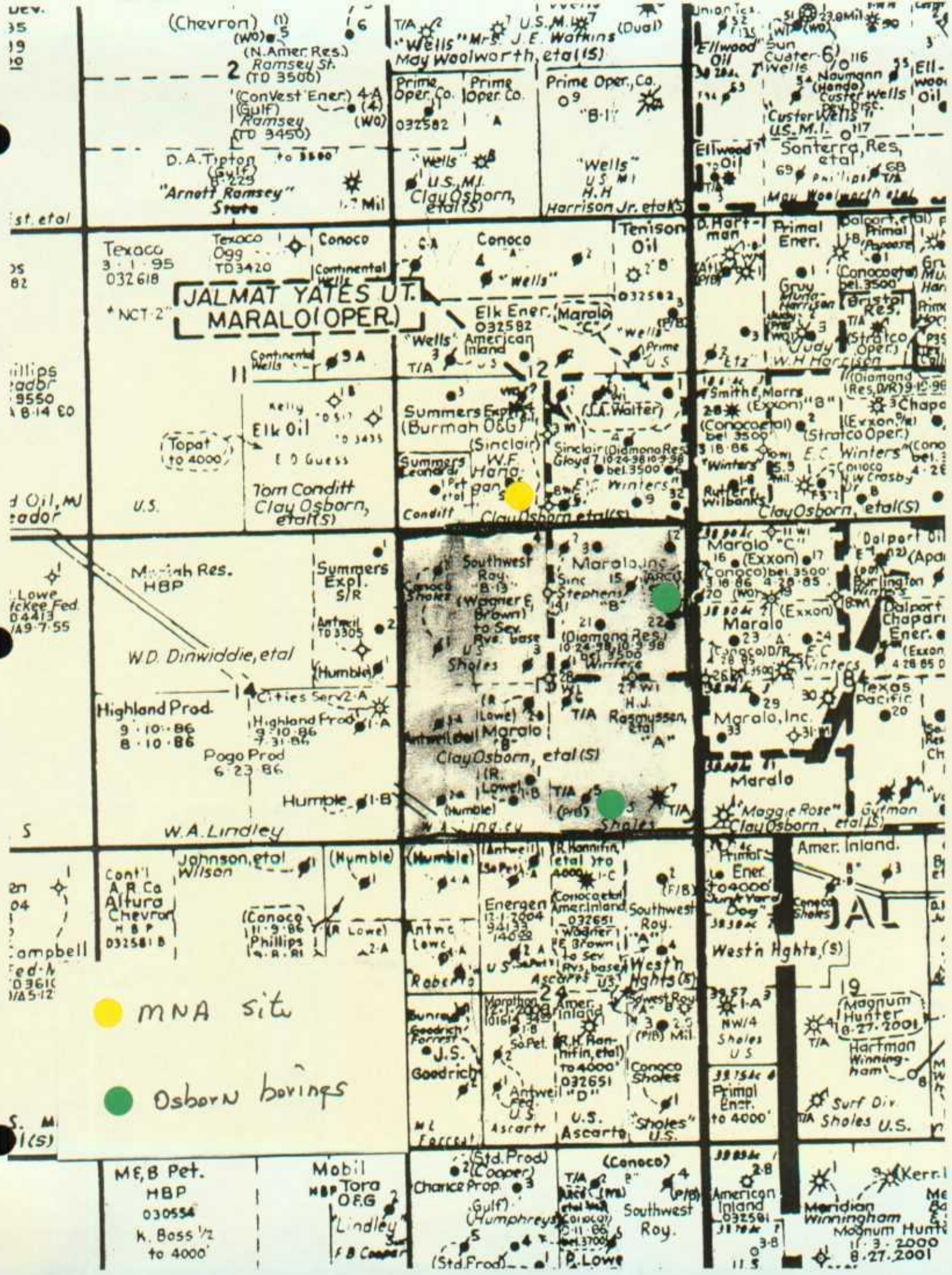
RECOMMENDATIONS

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.

WGS84 103°12'00" W



Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)



● MNA site
● Osborn borings



ARDINAL LABORATORIES

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-Cl ⁻ B
--------------------------	------------------------

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

*Matrix interference (color) observed.

Amy Hill
Chemist

4/28/03
Date

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. If no payment 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.



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: 04/29/03
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, 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.

ARDINAL 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

Page ____ of ____

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

Company Name: Edlie Sany Consulting		P.O. #:		BILL TO		ANALYSIS REQUEST									
Project Manager: Edlie Sany		Company:													
Address: 601 W. Illinois		Attn:													
City: Adams		Address:													
State: NM		City:													
Zip: 87242		State:													
Phone #: 2-22-34		Phone #:													
Fax #: 2-6949		Fax #:													
Project #: MNH		Project Owner: D. Alexander													
Project Name: MNH - Managon		State: NM													
Project Location: Osborn Ranch - JLN.M.		City: Albuquerque													
Sampler Name: Edlie Sany		Phone #:													
Fax #:															
FOR LAB USE ONLY															
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV		SAMPLING			
				GROUNDWATER		WASTEWATER		SOIL		CRUDE OIL		SLUDGE			
				OTHER:		ACID/BASE:		ICE / COOL		OTHER:					
				DATE		TIME									
H1619-9		MNH 2-3		✓		✓		✓		✓		✓			
-10		MNH 2-4		✓		✓		✓		✓		✓			
-11		MNH 2-5		✓		✓		✓		✓		✓			
-12		MNH 2-6		✓		✓		✓		✓		✓			
-13		MNH 2-7		✓		✓		✓		✓		✓			
PLEASE NOTE: Liability and Damages. Certificate of liability and damage is available only for any claim arising within the period of time stated in the contract for the client for the service. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Certified within 30 days after completion of the applicable service. In no event shall Certified 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 Certified, regardless of whether such claim is based upon any of the above stated reasons or otherwise.															
Sampler Relinquished:		Date: 4/25		Time: 3:00		Received By:		Sample Condition:		CHECKED BY:		Add'l Phone #:			
Relinquished By:		Date:		Time:		Received By: (Lab Staff)		Sample Condition:		CHECKED BY: (Initials)		Add'l Fax #:			
Delivered By: (Circle One)		Fax Result:		Phone Result:		REMARKS:									
Sampler - UPS - Bus - Other:		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No											

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

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

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

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	Eddie Seay	Eddie Seay Consulting
Allen Hodge	Allen Hodge	Phoenix Env.
Michael Seay	Michael Seay	Phoenix Env.
Henry Slope	Henry W Slope	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. 13 T25S R36E Type of Work Performed: SOIL BORING / MANDREL WELL
Type Of Work: X Routine _____ Non-Routine
Number Of Employees: 3 Phoenix 1 Contractor
Initial Safety Orientation Required: X Yes _____ No
List the Personal Protective Equipment For This Job: HARD HAT, STEEL TOE BOOTS,
HEARING PROTECT., 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	Eddie Seay	Eddie Seay Consultant
ALLAN Hodge	ALLAN Hodge	Phoenix Env.
Michael Seay	Michael Seay	Phoenix Env.
Henry Slope	Henry W Slope	Phoenix Env.

M
N
A



M
N
A

#1





#1
ANZ
M



#1
ANZ
M

M
N
A

#2



M
N
A

#2





M
N
A
#2



M
N
A
#2