

1R - 277

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

1995-



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION  
RECEIVED  
'95 FEB 24 AM 8 52

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

**NMOCD Inter-Correspondence**

To: Bill Olson-Hydrogeologist Santa Fe Office  
From: Wayne Price-Environmental Engineer District I  
Date: February 22, 1995  
Reference: Unocal Pit Closure S. Vacuum Unit-Buckeye NM  
Unit I sec 35-18s-R35e  
Subject: Request for Information

Comments:

Dear Bill,

Please find enclosed a copy of the file on the Unocal pit closure you requested. This pit was closed using a solidification process. At the end of the pit closure Unocal elected to install a temporary monitor well to ensure they have a clean closure. The monitor well was installed "down-dip" and just south of the pit area.

The water was sampled and the results are included in the file enclosed. Please refer to letter dated 2/9/95 (monitor well results). Please note that when Unocal drilled the monitor well they found soil contamination outside of the remediation area.

Their initial site assessment evidently missed this area. Unocal had a consultant on site for most of the project.

cc: Jerry Sexton-District I Supervisor

Attachments-1 (file)





MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time

~ ~~2:00 PM~~

Date

2/15/95

Originating Party

Other Parties

JIM MASON - MNSCAL

Subject

PIE CLOSURE - 5 NAC UNIT Buckeye NM  
UNIT I SEC 35-185-R35E

Discussion

CALLED & INFORMED ME THAT THEY  
WILL BE ON SITE TO COMPLETE  
MONITOR WELL INSTALLATION FOR  
FUTURE USE.

Conclusions or Agreements

WILL CEMENT/3-5% BENTONITE AROUND 2" PVC  
PIPE TO SURFACE, WILL INSTALL PAD, WELL PROTECTION  
PIPE & LOCK!

Distribution

cc: BILL OLSON  
JERRY BERTON

Signed



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

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HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

**NMOCD Inter-Correspondence**

To: Jerry Sexton-District I Supervisor

From: Wayne Price-Environmental Engineer District I

Date: February 9, 1995  
10:00 am

Reference: Unocal Pit Closure South Vacuum Unit  
Unit I-Sec 35-18s-R35e

Subject: Monitor well results-analysis attached

**Comments:**

Jim Mason with Unocal delivered the analytical results of the recent sampling events of the monitor well. After reviewing the results it appears that NM ground water standards have been exceeded, therefore I recommended that Mr. Mason contact Roger Anderson and notify him of the situation.

It appears the chlorides and TDS exceeded the standards. Also, there still appears to be a contaminated area just south of the pit where the monitor well was installed. Soil borings taken at 37-38 feet below surface in this area indicates a TPH level of 4926 ppm and at 50-51 feet it is 1,785 ppm. The top of the water table is approximately 58 feet below surface.

This area apparently was missed during the excavation. It is not known at this time the extent or magnitude of the remaining soil and ground water contamination.

Please note Unocal has initiated all of the remediation activities as of to date, and has been doing an excellent job. They have been very prompt in keeping us aware of their activities!

cc: Roger Anderson-Environmental Bureau Chief  
Bill Olson-Hydrogeologist  
Jim Mason-Unocal



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

February 6, 1995

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

**RECEIVED**

Sample Matrix: Water

**U C D HOBBS  
OFFICE**

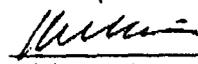
Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

Date Received: 1/27/95  
Analysis Date: 2/3/95

Parameter	Value (mg/l)	QC	% Accuracy	Detection Limit
Sample ID: 9501271040 MW-1				
Arsenic (As)	<0.1	10.7	107	0.1
Selenium (Se)	<0.2	2.1	105	0.2
Chromium (Cr)	<0.01	10.6	106	0.01
Cadmium (Cd)	<0.01	2.09	101	0.01
Lead (Pb)	<0.05	10.5	105	0.05
Barium (Ba)	<0.05	197	98	0.05
Silver (Ag)	<0.01	10.4	104	0.01
Mercury (Hg)	<0.001	0.022	95	0.001

Methods: EPA SW 846-3005, 6010, 7741.

Metals QC: 2.0 mg/L Cd, Se, ; 200 mg/L Ba; 10 mg/L As, Pb, Cr and Ag; and 0.005 mg/L Hg.

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

February 8, 1995

**RECEIVED**

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

100  
OCD HOBBS  
OFFICE

Sample Matrix: Water

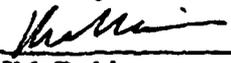
Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

Date Received: 1/27/95  
Analysis Date: 2/3/95

<u>EPA 8270 Compounds (ppm)</u>	<u>Value (ppm)</u>	<u>Detection Limit</u>	<u>QC</u>	<u>%IA</u>
<b>Sample ID: 9501271100 MW-1</b>				
Napthalene	ND	0.001	0.454	91

<u>Surrogates</u>	<u>%Recovery</u>
2-Fluorophenol SURR	106
Phenol-d5 SURR	104
Nitrobenzene-d5 SURR	88
2-Fluorobiphenyl	96
2,4,6-Tribromophenol SURR	105
Terphenyl-d14 SURR	128

Methods: EPA SW846-8270.

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 30, 1995

**RECEIVED**

FEB 06 1995  
OCD HOBBS  
OFFICE

GCL Environmental Sciences & Engineering  
Mr. Gilbert VanDeventer  
306 West Wall, Suite 818  
Midland, Texas 79701

Sample Matrix: Water

Project: Unocal, South Vacuum Unit  
Project Manager: Gilbert VanDeventer

Date Received: 1/27/95  
Analysis Date: 1/30/95

Compounds	Actual (ug/l)	Detection Limit (ug/l)	QC	%IA
<b>Sample ID: 9501271045 MW-1</b>				
Benzene	ND	1.0	80	80
Toluene	ND	1.0	82	82
Ethylbenzene	ND	1.0	83	83
Xylene (m,p)	ND	1.0	163	82
Xylene (o)	ND	1.0	83	83
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a,a Trifluorotoluene	90			

QC= 100 ug/l BTE (o)X & 200 ug/l (m,p) X. Surrogate Spike=80 ug/l a,a,a Trifluorotoluene  
Methods: EPA SW 846-8020/5030

ND = Not Detected

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

February 6, 1995

**RECEIVED**

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

UCD HOBBS  
OFFICE

Sample Matrix: Water

Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

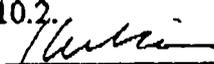
Date Received: 1/27/95

Analysis Date: 2/3/95

Sample ID: 9501271035 MW-1

	Conductivity (uS/cm)	pH (s.u.)	Chlorides (mg/L)	Sulfates (mg/L)	TDS (mg/L)	HCO <sub>3</sub> (mg/l)
	4,300	7.5	1,174	120	2,250	231
Quality Control	---	7.0	500	10	---	---
% Accuracy		100	100	100		

Methods: EPA-600/4-79-020 120.1, 150.1, 325.3, 375.4, 160.1, 310.2.

  
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February 6, 1995

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

**RECEIVED**

U C D HOBBS  
OFFICE

Sample Matrix: Water

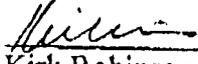
Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

Date Received: 1/27/95  
Analysis Date: 2/3/95

	Ca++ (mg/L)	Mg++ (mg/L)	Na+ (mg/L)	K+ (mg/L)
9501271035 MW-1	297	35.3	674	13.5
Quality Control -----	19.1	21.6	19.8	53.4
% IA	97	108	99	107

QC: Ca++ 20 mg/L, Mg++ 20 mg/L, Na+ 20 mg/L, K+ 50 mg/L

Methods: EPA-600/4-79-020 215.1, 242.1, 273.1, 258.1.

  
Kirk Robinson

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"Don't Treat Your Soil Like Dirt!"

January 30, 1995

GCL Environmental Sciences & Engineering  
Mr. Gilbert VanDeventer  
306 West Wall, Suite 818  
Midland, Texas 79701

RECEIVED

Sample Matrix: Soil

Project: Unocal, South Vacuum Unit  
Project Manager: Gilbert VanDeventer

100 10 1995  
OCD HOBBS  
OFFICE

Date Received: 1/27/95  
Analysis Date: 1/30/95

Compounds	Actual (mg/kg)	Detection		%IA
		Limit (mg/kg)	QC	
<u>Sample ID: 9501251155 MW-1 (37-38')</u>				
Benzene	ND	0.1	0.080	80
Toluene	0.66	0.1	0.082	82
Ethylbenzene	0.26	0.1	0.083	83
Xylene (m,p)	2.50	0.1	0.163	82
Xylene (o)	2.56	0.1	0.083	83
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a Trifluorotoluene	108			

<u>Sample ID: 9501251545 MW-1 (50-51')</u>				
Benzene	ND	0.1	0.080	80
Toluene	0.49	0.1	0.082	82
Ethylbenzene	0.20	0.1	0.083	83
Xylene (m,p)	1.03	0.1	0.163	82
Xylene (o)	2.40	0.1	0.083	83
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a Trifluorotoluene	100			

QC= 100 ppb BTE (o)X & 200 ppb (m,p) X. Surrogate Spike=5 ppm a,a Trifluorotoluene  
Methods: EPA SW 846-8020/5030

ND = Not Detected

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 30, 1995

**RECEIVED**

GCL Environmental Sciences & Engineering  
Mr. Gilbert VanDeventer  
306 West Wall, Suite 818  
Midland, Texas 79701

JAN 30 1995

U C D HOBBS  
OFFICE

Sample Matrix: Soil

Project: Unocal, South Vacuum Unit  
Project Manager: Gilbert VanDeventer

Date Received: 1/27/95  
Analysis Date: 1/30/95

Parameter	Value	Units	EPA SW-846 Test Method
Sample ID: 9501251155 MW-1 (37-38')			418.1/3550

Total Petroleum Hydrocarbons 4,926 mg/kg

Sample ID: 9501251545 MW-1 (50-51')

Total Petroleum Hydrocarbons 1,785 mg/kg

---

Total Petroleum Hydrocarbons QC: 145 ppm  
 Detection Limit 10 mg/kg

	Result	% IA
TPH	147 ppm	101

  
Kirk Robinson

NEW MEXICO OIL CONSERVATION COMMISSION  
FIELD TRIP REPORT

INSPECTION  
CLASSIFICATION  
FACILITY  
HOURS  
QUARTER  
HOURS

Name WAYNE PRICE Date 1/27/75 Miles \_\_\_\_\_ District I  
Time of Departure 7 AM Time of Return 4 PM Car No. G 047

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature [Signature]

0 0 4 0

PIT CLOSURE

UNOCAL - PULLED SAMPLES FROM MW  
PURGED ≈ 20 to 25 GAL PVT  
IN DRUM - Red water level above  
Indicator - 59.57' TOP of water  
WITNESSED UNOCAL SAMPLE  
UNOCAL SAMPLE WATER CAUGHT  
WITH PLASTIC BAILER (TOP)  
4000 μMHO'S CONDUCTIVITY  
1100 μMHO'S PH 7.5-8.0  
(PVT) PALE YELLOW COLOR - ~~2~~ 7% SOLIDS  
VERY SLIGHT HYDROCARBON ODOR?  
+ 500 (40 ml vol) WATER SAMPLED PTD 89 PPM - 70 (BLANK) ≈ 29 PPM  
RESAMPLED PTD ≈ 0

Mileage

Per Diem

Hours

UIC \_\_\_\_\_

UIC \_\_\_\_\_

RFA \_\_\_\_\_

RFA \_\_\_\_\_

Other \_\_\_\_\_

Other \_\_\_\_\_

Unocal Energy Resources Division  
Unocal Corporation  
1004 North Big Spring, P.O. Box 3100  
Midland, Texas 79702  
Telephone (915) 685-6890  
Home (915) 756-3279



Jim D. Mason  
Safety/Environmental Supervisor-S. Permian  
Permian Basin Business Unit

W = Water Contamination  
O = Other

INSPECTION CLASSIFICATION

NATURE OF SPECIFIC WELL OR FACILITY INSPECTED

I = Injection Control - Any inspection of or injection project, facility, or well or from injection into any well. (SMD, Indry and production wells, water flows or pressure face injection equipment, plugging, etc.)

D = Drilling  
P = Production  
I = Injection  
C = Combined prod. inj. operations

R = Reclamation Fund Activity  
S = Reclamation Fund Activity inspections not related to injection or The Reclamation Fund

S = SMD  
U = Underground Storage  
G = General Operation  
F = Facility or location  
M = Meeting  
O = Other

E = Indicates some form of enforcement action taken in the field (shown immediately below the letter U, R or O)

NEW MEXICO OIL CONSERVATION COMMISSION  
FIELD TRIP REPORT

1/25 - 1/26/95

Name WAYNE PRICE Date \_\_\_\_\_ Miles \_\_\_\_\_ District I  
Time of Departure 7 AM Time of Return 4 PM Car No. G 047

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature [Signature]

INSPECTION	CLASSIFICATION	FACILITY	HOURS	QUARTER	HOURS
------------	----------------	----------	-------	---------	-------

0	0	PIL CLOSURE	10	0	
---	---	-------------	----	---	--

1/25/95 - 1/26/95 UNOCAL MW 35-185-352

1/25/95 - ENVIRONMENTAL SPILL CONTROL DRILLED HOLE  
FOR 9 1/2" HOLE - ALLEN HADGE / GIL VANDEVENTER  
10' SOIL CALICHE HARD 1400PM FID  
20' HARD CALICHE/SANDSTONE 2 PM FID  
37' OUT OF HARD/INTO SAND & GRAVEL 750PM FID  
40-43 SANDSTONE  
43-50' med-fine SAND 30PM FID  
58' TOP OF WATER -  
70' WATER SAND

SET 2" PVC PIPE 10' SCREEN IN  
5' " ODE  
4-100 LB SACK 816 SAND  
1- 50LB BENTONITE CHIPS  
TEMPORARY WELL

PLUG 15'  
SCREEN 10'  
DRY HOLE MARKER  
CMW  
20' FROM BOTTOM

Mileage	Hours
UIC _____	UIC _____
RFA _____	RFA _____
Other _____	Other _____

TYPE INSPECTION PERFORMED	INSPECTION CLASSIFICATION	NATURE OF SPECIFIC WELL OR FACILITY INSPECTED
H = Housekeeping	U = Underground Injection Control - Any inspection of or related to injection project, facility, or well or resulting from injection into any well. (SND, 2ndry injection and production wells, water flows or pressure tests, surface injection equipment, plugging, etc.)	D = Drilling
P = Plugging	R = Inspections relating to Reclamation Fund Activity	P = Production
C = Plugging Cleanup	O = Other - Inspections not related to injection or The Reclamation Fund	I = Injection
T = Well Test	E = Indicates some form of enforcement action taken in the field. (show immediately below the letter U, R or O)	C = Combined prod. inj. operations
R = Repair/Workover		S = SND
F = Waterflow		U = Underground Storage
M = Mishap or Spill		G = General Operation
W = Water Contamination		F = Facility or location
O = Other		H = Meeting
		O = Other

STATE OF NEW MEXICO  
NMOCD District I

INTER-OFFICE MEMO

To file: Unocal

Date: Jim Mason  
Time: 8:15 am

1/24/95

Telephone call:  X  Meeting:   Other:

Person called or attending:

Jim Mason-

REFERENCE: Pit Closure-South Vacuum Unit near Buckeye NM  
unit I 35-18s-35e

Subject: Progress report

Comments:

Jim Mason indicated they are complete with the solidification project and they are going to drill a monitor well starting Wednesday morning 1/23/95. He indicated they plan to drill 10' into the water table. They will use a 2" pvc with 15' of screen. Ten feet in and 5' out. They will sand/gravel pack with a bentonite plug set above.

They plan to develop well and pull 5 well volumes and sample water. If water analysis turns out ok then they will come back and pull pipe and fill hole from bottom to top with cement with 5% bentonite

I informed Mr. Mason that the NMOCD is not requiring him to drill a monitor well, he understood this and indicated that Unocal wants to make sure they are leaving a clean site for future liability reasons.

Wayne Price   
NMOCD Environmental Engineer-District I  
cc: Jerry Sexton-District I Supervisor  
Roger Anderson-Environmental Bureau Chief

5/20/94

ALLSTATE SERVICES  
P. O. BOX 11322  
MIDLAND, TX. 79702

ATTN: RANDY OFFIELD

# MATERIAL SAFETY DATA SHEET

(Complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200)



**SOUTHWESTERN  
PORTLAND CEMENT COMPANY  
ODESSA, TEXAS**

# SECTION I

## MANUFACTURER'S NAME AND ADDRESS

Southwestern Portland Cement Co.  
Southdown, Inc.  
1200 Smith Street, Suite 2500  
Houston, Texas 77002

## EMERGENCY TELEPHONE NO.

SOUTHWESTERN PORTLAND CEMENT  
ODESSA, TX.  
915-385-2800  
(24 hour phone number)

## CHEMICAL NAME AND SYNONYMS

Portland Cement (CAS #65997-15-1) "DUSZ"

## TRADE NAME AND SYNONYMS

"El Toro Type I"	(Construction Cement) ✓
"El Toro Type I/II"	(Construction Cement)
"El Toro Type III"	(Construction Cement)
"El Toro Type V"	(Construction Cement)
"El Toro Richmortar"	(Masonry Cement)
"El Toro Class C"	(Oil Well Cement)
"El Toro Class H"	(Oil Well Cement)
"El Toro Class A"	(Oil Well Cement)
"El Toro Type K"	(Expansive Cement)

## CHEMICAL FAMILY

## FORMULA

### Calcium Salts:

$3\text{CaO}\cdot\text{SiO}_2$	(CAS #12168-85-3)
$2\text{CaO}\cdot\text{SiO}_2$	(CAS #10034-77-2)
$3\text{CaO}\cdot\text{Al}_2\text{O}_3$	(CAS #12042-78-3)
$4\text{CaO}\cdot\text{Al}_2\text{O}_3\cdot\text{Fe}_2\text{O}_3$	(CAS #12068-35-8)
$\text{CaSO}_4\cdot 2\text{H}_2\text{O}$	(CAS #13397-24-5)

Additionally, small amounts of CaO and CaCO<sub>3</sub>, (in Masonry Cement) and 4CaO·3Al<sub>2</sub>O<sub>3</sub>·SO<sub>3</sub> (in Type K cement) may be present.

### Other Salts:

Small amounts of MgO, and trace amounts of K<sub>2</sub>SO<sub>4</sub> and Na<sub>2</sub>SO<sub>4</sub> may also be present.

---

## SECTION II — HAZARDOUS INGREDIENTS

Portland cement is classified merely as a nuisance dust by OSHA (29 CFR 1910.1000, Table Z-3), MSHA (30 CFR 56.5001, ACGIH TLV's for 1973, Appendix E), and ACGIH (TLV's for 1985-86, Appendix D). Portland cement is **NOT** listed by NTP, IARC, or OSHA as containing carcinogens.

### SECTION III — PHYSICAL DATA

#### BOILING POINT

Not applicable, as portland cement is a powdered solid

#### VAPOR PRESSURE

Not applicable, as portland cement is a powdered solid

#### VAPOR DENSITY

Not applicable, as portland cement is a powdered solid

#### SOLUBILITY IN WATER

Slight (0.1-1.0%)

#### SPECIFIC GRAVITY

3.10-3.20

#### PERCENTAGE VOLATILES BY VOLUME

0%

#### EVAPORATION RATE

Not applicable, as portland cement is a powdered solid

#### APPEARANCE AND ODOR

Gray powder; no odor

### SECTION IV — FIRE AND EXPLOSION HAZARD DATA

#### FLASH POINT

Portland cement is noncombustible and nonexplosive

#### FLAMMABLE OR EXPLOSIVE LIMITS

Not applicable

#### EXTINGUISHING MEDIA

Not applicable

#### SPECIAL FIREFIGHTING PROCEDURES

Not applicable

#### UNUSUAL FIRE & EXPLOSION HAZARDS

None

### SECTION V — HEALTH HAZARD DATA

#### THRESHOLD LIMIT VALUE

Respirable Dust - 5 mg/m<sup>3</sup>  
Total Dust - 10 mg/m<sup>3</sup>

#### EFFECTS OF OVEREXPOSURE

Acute: Wet cement, especially as an ingredient in plastic (unhardened) concrete, can dry the skin and cause alkali burns. Cement dust can irritate the eyes and upper respiratory system.

#### EMERGENCY & FIRST AID PROCEDURES

Irrigate eyes with water; consult physician. Wash exposed skin areas with soap and water.

Chronic: Cement dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the eye. Hypersensitive individuals may develop an allergic dermatitis (skin rash).

### SECTION VI — REACTIVITY DATA

#### STABILITY

Product is stable.  
Keep dry until used.

#### HAZARDOUS DECOMPOSITION PRODUCTS

None

#### INCOMPATIBILITY

None

#### HAZARDOUS POLYMERIZATION

Will not occur

## SECTION VII — SPILL PROCEDURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED

Use dry cleanup methods that do not disperse the dust into the air.

### WASTE DISPOSAL METHOD

Material can be returned to container for later use, or it can be disposed of as a common waste.

## SECTION VIII — SPECIAL PROTECTION INFORMATION

### RESPIRATORY PROTECTION

In dusty environments, use a NIOSH approved respirator.

### VENTILATION

Use exhaust fans to control airborne dust levels.

### EYE PROTECTION

In dusty environments, use tight fitting goggles.

### SKIN PROTECTION

Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact with wet cement, especially in plastic (unhardened) concrete. Immediately after working with cement, workers should shower with soap and water. Precautions must be observed because wet cement burns with little warning — little heat is sensed.

## SECTION IX — SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

None (See Section VIII)

### OTHER PRECAUTIONS

None

## SECTION X — ABBREVIATIONS

### ACGIH

American Conference of Governmental Industrial Hygienists

### CAS

Chemical Abstract Service

### CFR

Code of Federal Regulations

### IARC

International Agency for Research on Cancer

### m<sup>3</sup>

cubic meter

### mg.

milligram

### MSHA

Mine Safety and Health Administration

### NIOSH

National Institute for Occupational Safety & Health

### NTP

National Toxicology Program

### OSHA

Occupational Safety and Health Administration

### TLV's

Threshold Limit Values

CC: J SEFTON  
BP

NEW MEXICO OIL CONSERVATION COMMISSION  
FIELD TRIP REPORT

INSPECTION	CLASSIFICATION	FACILITY	HOURS	QUARTER
			HOURS	HOURS
0	0	0	2	0

Name WAYNE PRICE Date 1/19/95 Miles \_\_\_\_\_ District I  
 Time of Departure 7 AM Time of Return 4 PM Car No. G 047

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature [Signature]

UNOCAL PIZ - RANNEY ALFISA ALLSTREE  
 CONST CO. -

- CEMENT SOLIDIFICATION PROJECT -

MSDS ATTACHED  
 TOOK PICTURES

<u>Mileage</u>	<u>Per Diem</u>	<u>Hours</u>
UIC _____	UIC _____	UIC _____
RFA _____	RFA _____	RFA _____
Other _____	Other _____	Other _____

TYPE INSPECTION PERFORMED

- H = Housekeeping
- P = Plugging
- C = Plugging Cleanup
- T = Well Test
- R = Repair/Workover
- F = Waterflow
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- O = Other

INSPECTION CLASSIFICATION

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NATURE OF SPECIFIC WELL OR FACILITY INSPECTED

- D = Drilling
- P = Production
- I = Injection
- C = Combined prod. inj. operations
- S = SWD
- U = Underground Storage
- G = General Operation
- F = Facility or location
- M = Meeting
- O = Other

5/20/94

ALLSTATE SERVICES  
P. O. BOX 11322  
MIDLAND, TX. 79702

ATTN: RANDY OFFIELD

# MATERIAL SAFETY DATA SHEET

(Complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200)



**SOUTHWESTERN  
PORTLAND CEMENT COMPANY  
ODESSA, TEXAS**

# SECTION I

## MANUFACTURER'S NAME AND ADDRESS

Southwestern Portland Cement Co.  
Southdown, Inc.  
1200 Smith Street, Suite 2500  
Houston, Texas 77002

## EMERGENCY TELEPHONE NO.

SOUTHWESTERN PORTLAND CEMENT  
ODESSA, TX.  
915-385-2800  
(24 hour phone number)

## CHEMICAL NAME AND SYNONYMS

Portland Cement (CAS #65997-15-1) "DUSZ"

## TRADE NAME AND SYNONYMS

"El Toro Type I"	(Construction Cement) ✓
"El Toro Type I/II"	(Construction Cement)
"El Toro Type III"	(Construction Cement)
"El Toro Type V"	(Construction Cement)
"El Toro Richmortar"	(Masonry Cement)
"El Toro Class C"	(Oil Well Cement)
"El Toro Class H"	(Oil Well Cement)
"El Toro Class A"	(Oil Well Cement)
"El Toro Type K"	(Expansive Cement)

## CHEMICAL FAMILY

## FORMULA

Calcium Salts:

$3\text{CaO}\cdot\text{SiO}_2$	(CAS #12168-85-3)
$2\text{CaO}\cdot\text{SiO}_2$	(CAS #10034-77-2)
$3\text{CaO}\cdot\text{Al}_2\text{O}_3$	(CAS #12042-78-3)
$4\text{CaO}\cdot\text{Al}_2\text{O}_3\cdot\text{Fe}_2\text{O}_3$	(CAS #12068-35-8)
$\text{CaSO}_4\cdot 2\text{H}_2\text{O}$	(CAS #13397-24-5)

Additionally, small amounts of CaO and CaCO<sub>3</sub>, (in Masonry Cement) and 4CaO·3Al<sub>2</sub>O<sub>3</sub>·SO<sub>3</sub> (in Type K cement) may be present.

Other Salts:

Small amounts of MgO, and trace amounts of K<sub>2</sub>SO<sub>4</sub> and Na<sub>2</sub>SO<sub>4</sub> may also be present.

## SECTION II — HAZARDOUS INGREDIENTS

Portland cement is classified merely as a nuisance dust by OSHA (29 CFR 1910.1000, Table Z-3), MSHA (30 CFR 56.5001, ACGIH TLV's for 1973, Appendix E), and ACGIH (TLV's for 1985-86, Appendix D). Portland cement is **NOT** listed by NTP, IARC, or OSHA as containing carcinogens.

## SECTION III — PHYSICAL DATA

### BOILING POINT

Not applicable, as portland cement is a powdered solid

### VAPOR PRESSURE

Not applicable, as portland cement is a powdered solid

### VAPOR DENSITY

Not applicable, as portland cement is a powdered solid

### SOLUBILITY IN WATER

Slight (0.1-1.0%)

### SPECIFIC GRAVITY

3.10-3.20

### PERCENTAGE VOLATILES BY VOLUME

0%

### EVAPORATION RATE

Not applicable, as portland cement is a powdered solid

### APPEARANCE AND ODOR

Gray powder; no odor

## SECTION IV — FIRE AND EXPLOSION HAZARD DATA

### FLASH POINT

Portland cement is noncombustible and nonexplosive

### FLAMMABLE OR EXPLOSIVE LIMITS

Not applicable

### EXTINGUISHING MEDIA

Not applicable

### SPECIAL FIREFIGHTING PROCEDURES

Not applicable

### UNUSUAL FIRE & EXPLOSION HAZARDS

None

## SECTION V — HEALTH HAZARD DATA

### THRESHOLD LIMIT VALUE

Respirable Dust - 5 mg/m<sup>3</sup>  
Total Dust - 10 mg/m<sup>3</sup>

### EMERGENCY & FIRST AID PROCEDURES

Irrigate eyes with water; consult physician. Wash exposed skin areas with soap and water.

### EFFECTS OF OVEREXPOSURE

Acute: Wet cement, especially as an ingredient in plastic (unhardened) concrete, can dry the skin and cause alkali burns. Cement dust can irritate the eyes and upper respiratory system.

Chronic: Cement dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the eye. Hypersensitive individuals may develop an allergic dermatitis (skin rash).

## SECTION VI — REACTIVITY DATA

### STABILITY

Product is stable.  
Keep dry until used.

### INCOMPATIBILITY

None

### HAZARDOUS DECOMPOSITION PRODUCTS

None

### HAZARDOUS POLYMERIZATION

Will not occur

## SECTION VII — SPILL PROCEDURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED

Use dry cleanup methods that do not disperse the dust into the air.

### WASTE DISPOSAL METHOD

Material can be returned to container for later use, or it can be disposed of as a common waste.

## SECTION VIII — SPECIAL PROTECTION INFORMATION

### RESPIRATORY PROTECTION

In dusty environments, use a NIOSH approved respirator.

### VENTILATION

Use exhaust fans to control airborne dust levels.

### EYE PROTECTION

In dusty environments, use tight fitting goggles.

### SKIN PROTECTION

Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact with wet cement, especially in plastic (unhardened) concrete. Immediately after working with cement, workers should shower with soap and water. Precautions must be observed because wet cement burns with little warning — little heat is sensed.

## SECTION IX — SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

None (See Section VIII)

### OTHER PRECAUTIONS

None

## SECTION X — ABBREVIATIONS

### ACGIH

American Conference of Governmental Industrial Hygienists

### CAS

Chemical Abstract Service

### CFR

Code of Federal Regulations

### IARC

International Agency for Research on Cancer

m<sup>3</sup>

cubic meter

mg.

milligram

### MSHA

Mine Safety and Health Administration

### NIOSH

National Institute for Occupational Safety & Health

### NTP

National Toxicology Program

### OSHA

Occupational Safety and Health Administration

### TLV's

Threshold Limit Values



1004 N. BIG SPRING, SUITE 300  
MIDLAND, TX 79701  
915/685-7600

FACSIMILE # 915/685-6701  
COVER SHEET

TO: OIL CONSERVATION DIVISION (ATT: WAYNE PRICE)

FAX # \_\_\_\_\_

FROM: JIM MASON

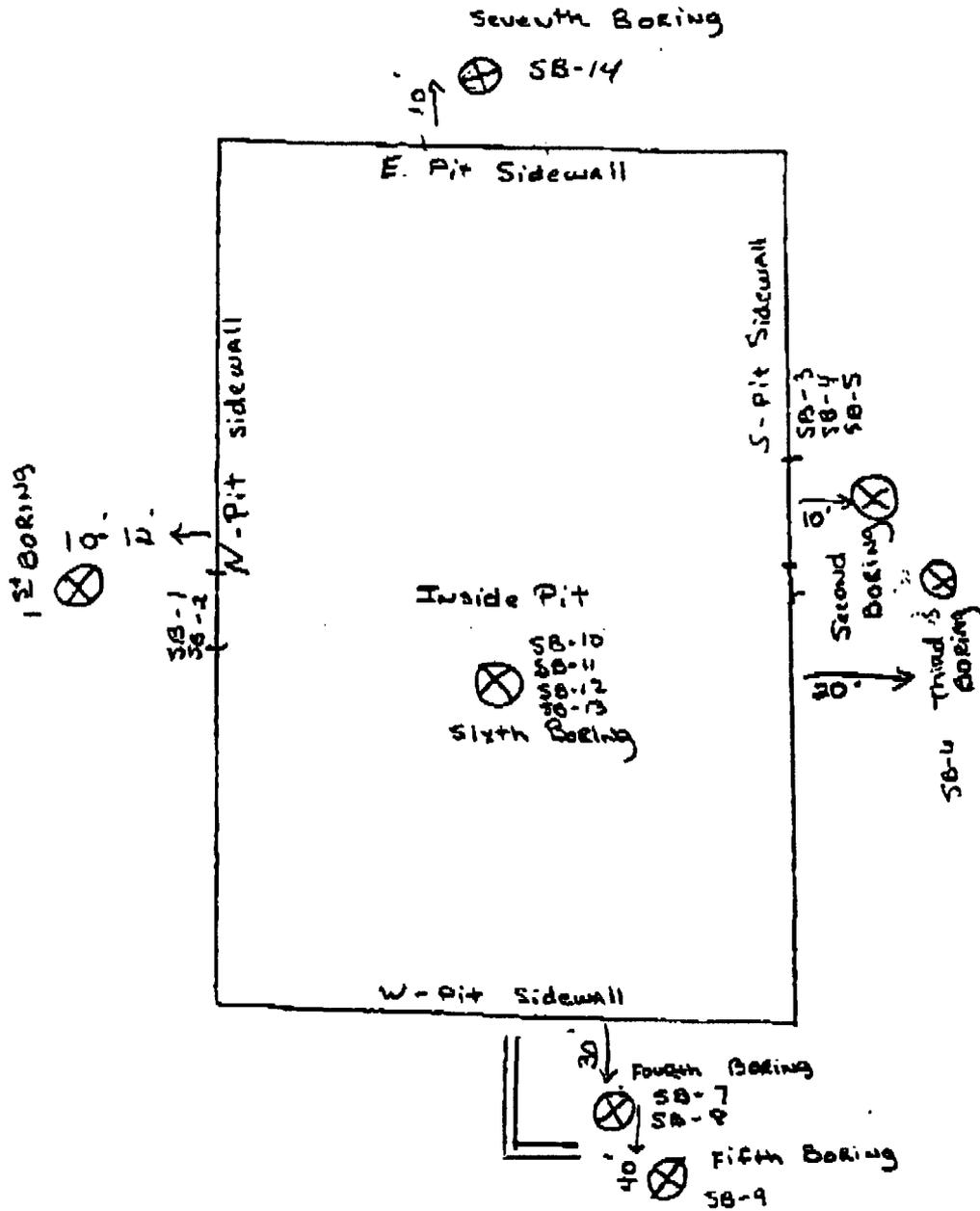
# OF PAGES \_\_\_\_\_

COMMENTS: WAYNE, THESE ARE THE RESULTS  
OF THE SOIL SAMPLES TAKEN ON THE  
SOUTH VACUUM UNIT SWD PIT. I WILL  
GIVE YOU A CALL AND DISCUSS THEM

The information contained in this fax message is confidential information intended only for the use of the individual of entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the above address via the U.S. Postal Service. Thank you.

If you have difficulty receiving transmission, call 915/685-6869.

Sample Sites



Soil BORINGS  
1-12-95

## SOUTH VACUUM UNIT SWD PIT

## SAMPLE POINT DEPTHS

<u>SAMPLE POINT DESIGNATION</u>		<u>DEPTH BELOW GROUND LEVEL</u>
1.	SB-2	20'
2.	SB-5	25'
3.	SB-6	10'
4.	SB-8	16'
5.	SB-9	15'
6.	SB-10	15'
7.	SB-11	20'
8.	SB-12	25'
9.	SB-13	30'

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

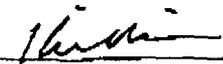
January 16, 1995

Client: Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

Job ID: Vacuum Lease  
Date Received: 1/13/95  
Date Reported: 1/16/95

Sample Matrix: Soil

Parameter	Value	Units	EPA Test Method
Sample ID: SB-2 Total Chlorides	638	ppm	325.3
Sample ID: SB-5 Total Chlorides	213	ppm	
Sample ID: SB-6 Total Chlorides	383	ppm	
Sample ID: SB-8 Total Chlorides	128	ppm	
Sample ID: SB-9 Total Chlorides	298	ppm	
Sample ID: SB-10 Total Chlorides	681	ppm	
Sample ID: SB-11 Total Chlorides	425	ppm	
Sample ID: SB-12 Total Chlorides	723	ppm	
Sample ID: SB-13 Total Chlorides	427	ppm	

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 16, 1995

Client: Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

Sample Matrix: Soil

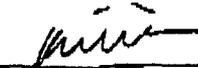
Job ID: Vacuum Lease  
Date Received: 1/13/95  
Date Reported: 1/16/95

Parameter	Value	Units	EPA Test Method
Sample ID: SB-2			
Total Petroleum Hydrocarbons	41	ppm	418.1/3550
Sample ID: SB-5			
Total Petroleum Hydrocarbons	344	ppm	
Sample ID: SB-6			
Total Petroleum Hydrocarbons	<10.0	ppm	
Sample ID: SB-8			
Total Petroleum Hydrocarbons	375	ppm	
Sample ID: SB-9			
Total Petroleum Hydrocarbons	<10.0	ppm	
Sample ID: SB-10			
Total Petroleum Hydrocarbons	18,444	ppm	
Sample ID: SB-11			
Total Petroleum Hydrocarbons	1,976	ppm	
Sample ID: SB-12			
Total Petroleum Hydrocarbons	1,118	ppm	
Sample ID: SB-13			
Total Petroleum Hydrocarbons	152	ppm	

QC (Quality Control)

Total Petroleum Hydrocarbons 418.1 QC: 150 ppm  
Detection Limit 10.0 ppm

	Result	%LA
TPH 418.1	150 ppm	100

  
Kirk Robinson

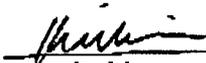
page 3 BTEX Continued

<u>Compounds</u>	<u>Actual (ppm)</u>	<u>Detection Limit (ppm)</u>	<u>QC</u>	<u>%IA</u>
Sample ID: SB-12				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
<u>a,a,a Trifluorotoluene</u>	<u>94</u>			

Sample ID: SB-13				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
<u>a,a,a Trifluorotoluene</u>	<u>97</u>			

QC= 100 ppb BTE (o)X & 200 ppb (m,p) X. Surrogate Spike=120 ppb a,a,a Trifluorotoluene  
Methods: EPA SW 846-8020/5030

ND = Not Detected

  
Kirk Robinson

page 2 BTEX Continued

<u>Compounds</u>	<u>Actual (ppm)</u>	<u>Detection Limit (ppm)</u>	<u>OC</u>	<u>%IA</u>
<b>Sample ID: SB-8</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
<u>a,a,a Trifluorotoluene</u>	<u>96</u>			
<b>Sample ID: SB-9</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
<u>a,a,a Trifluorotoluene</u>	<u>94</u>			
<b>Sample ID: SB-10</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
<u>a,a,a Trifluorotoluene</u>	<u>97</u>			
<b>Sample ID: SB-11</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
<u>a,a,a Trifluorotoluene</u>	<u>96</u>			

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 16, 1995

Client: Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

Sample Matrix: Soil

Job ID: Vacuum Lease  
Date Received: 1/13/95  
Date Reported: 1/16/95

Compounds	Actual (ppm)	Detection Limit (ppm)	QC	%IA
<b>Sample ID: SB-2</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a,a Trifluorotoluene	90			
<b>Sample ID: SB-5</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a,a Trifluorotoluene	88			
<b>Sample ID: SB-6</b>				
Benzene	ND	0.1	0.100	100
Toluene	ND	0.1	0.099	99
Ethylbenzene	ND	0.1	0.099	99
Xylene (m,p)	ND	0.2	0.195	98
Xylene (o)	ND	0.1	0.098	98
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a,a Trifluorotoluene	97			

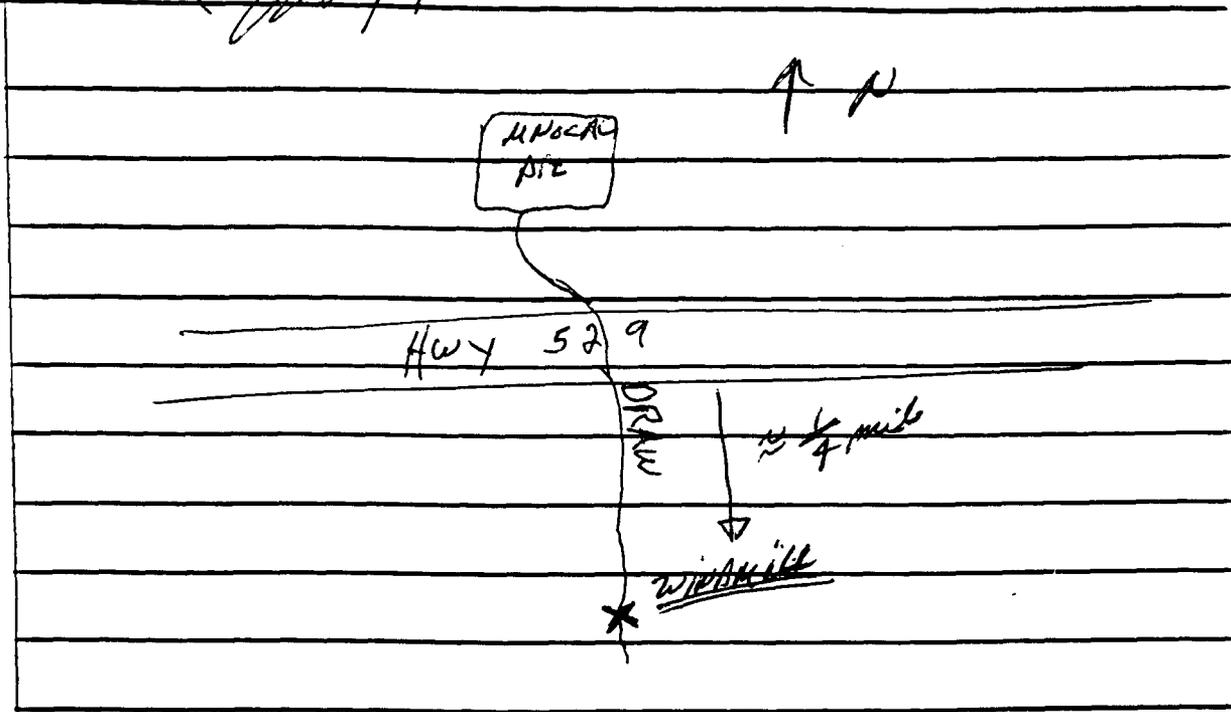
NEW MEXICO OIL CONSERVATION COMMISSION  
FIELD TRIP REPORT

INSPECTION  
CLASSIFICATION  
FACILITY  
HOURS  
QUARTER  
HOURS

Name WAYNE PRICE Date 1/23/95 Miles \_\_\_\_\_ District I  
Time of Departure 7 AM Time of Return 4 PM Car No. G 047

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature *Wayne Price*



Took WATER SAMPLE FROM WINDMILL  
CL  $\approx$  35 ppm  
PH  $\approx$  7  
Clean water - (NO SMELL)

Mileage	Per Diem	Hours
UIC _____	UIC _____	UIC _____
RFA _____	RFA _____	RFA _____
Other _____	Other _____	Other _____

TYPE INSPECTION PERFORMED

INSPECTION CLASSIFICATION

NATURE OF SPECIFIC WELL OR FACILITY INSPECTED

- H = Housekeeping
- P = Plugging
- C = Plugging Cleanup
- T = Well Test
- R = Repair/Workover
- F = Waterflow
- M = Mishap or Spill
- W = Water Contamination
- O = Other

- U = Underground Injection Control - Any inspection of or related to injection project, facility, or well or resulting from injection into any well. (SMD, 2ndry injection and production wells, water flows or pressure tests, surface injection equipment, plugging, etc.)
- R = Inspections relating to Reclamation Fund Activity
- O = Other - Inspections not related to injection or The Reclamation Fund.

- D = Drilling
- P = Production
- I = Injection
- C = Combined prod. inj. operations
- S = SMD
- U = Underground Storage
- G = General Operation
- F = Facility or location
- M = Meeting
- O = Other

E = Indicates some form of enforcement action taken in the field. (show immediately below the letter: U, R or O)

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-03151
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. E-1533

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name South Vacuum Unit "35" SWD
--

1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Surface Impoundment
---

8. Well No.
-------------

2. Name of Operator Union Oil Company of California dba UNOCAL
---

9. Pool name or Wildcat South Vacuum Devonian
--

3. Address of Operator P.O. Box 3100 Midland, TX
---

4. Well Location Unit Letter <u>I</u> : <u>1980</u> Feet From The <u>South</u> Line and <u>660</u> Feet From The <u>East</u> Line Section <u>35</u> Township <u>18-S</u> Range <u>35-E</u> NMPM Lea County
--

10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3860' GR
--

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <u>Surface Impoundment Closure</u> <input type="checkbox"/>		OTHER: _____ <input type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

UNOCAL proposes to delineate and then remediate an unlined surface impoundment known to contain levels of petroleum hydrocarbons at the South Vacuum Unit SWD. During delineation an assessment will be made to determine the extent of contamination below the surface and to the sides of the impound by sampling and field testing. After delineation, solidification material will be placed in the impoundment and the contamination will be mixed with solidification material until proper consistency is achieved, then remixed with added water to create an encapsulation reaction. Soil will then be placed over the area and the site will be revegetated. Vertical depth to ground water in this area is approximately 50'. There are no known private or domestic water wells in the area and the distance to any ponds, rivers or streams is in excess of 1000'. This gives the impoundment an overall ranking score of 20 points.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jimmy Mason TITLE HES Coordinator DATE 12-5-94

TYPE OR PRINT NAME Jimmy Mason TELEPHONE NO. 915/685-

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

??

JAN 10 1995

NEW MEXICO OIL CONSERVATION COMMISSION  
FIELD TRIP REPORT

INSPECTION	CLASSIFICATION	FACILITY	HOURS	QUARTER	HOURS
------------	----------------	----------	-------	---------	-------

Name WAYNE PRICE Date \_\_\_\_\_ Miles \_\_\_\_\_ District I  
 Time of Departure 7 AM Time of Return 4 PM Car No. G 047

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature [Handwritten Signature]

0 0 S 2 0

RES: UNOCAL PIT REMEDIATION - 35-18-5-35E UNIT I  
 1980' FSL 660 FEL  
 S WAC UNIT - BUCKEYE

LOCATION SIGN (DALLAS PRODUCTION)

SHOWS SEC 36, C-103 SHOWS SEC 35?

ALLSTATE (CONTRACTOR) - REVIEWED & SIGN OSHA HEALTH PLA

TOOK SAMPLE ≈ 10' DEEP TPH 17,960 PPM

BTEX (PIA) 309 PPM (HEARSAP) <sup>FIELD</sup>

SOIL → CHROBIS ≈ 2500 PPM

SAMPLE HEAVY OIL FACTORY SMELL (HYDRO CARBON)

VISUAL CONTAMINATION!

≈ 50 YARDS DUG OUT!

Mileage

UIC \_\_\_\_\_

RFA \_\_\_\_\_

Other \_\_\_\_\_

Per Diem

UIC \_\_\_\_\_

RFA \_\_\_\_\_

Other \_\_\_\_\_

Hours

UIC \_\_\_\_\_

RFA \_\_\_\_\_

Other \_\_\_\_\_

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- U = Underground Storage
- G = General Operation
- F = Facility or location
- M = Meeting
- O = Other

STATE OF  
NEW MEXICO  
OIL  
CONSERVATION  
DIVISION



MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 1:20 PM

Date 1/4/95

Originating Party

Other Parties

JIM MASON - UNOCAL

Subject

PIT CLOSURE

Discussion

LEFT MESSAGE - HAVE SENT GUIDELINES + C-103

Conclusions or Agreements

PLEASE CALL WHEN YOU START INVESTIGATION AND/OR  
REMEDATION!

Distribution

CCI JERRY SEXTON

Signed

A handwritten signature in black ink, appearing to read "Jerry Sexton", written over a horizontal line.



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

January 3, 1995

Mr. Jim Mason  
Unocal Corporation  
P.O. 3100  
Midland, Texas 79702

Dear Mr. Mason,

Per your telephone request, I am enclosing the NMOCD pit closure guidelines. Please notice the last page of the guidelines now contains a pit closure form to be filled out and submitted to the appropriate NMOCD offices as requested on the form.

If you have any questions please don't hesitate to call or write.

Sincerely yours,

A handwritten signature in cursive script that reads "Wayne Price".

Wayne Price- Environmental Engineer

cc: Jerry Sexton District I Supervisor

attachments-1



# OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO.  
30-025-03151

5. Indicate Type of Lease  
STATE  FEE

6. State Oil & Gas Lease No.  
E-1533

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name  
South Vacuum Unit "35" SWD

1. Type of Well:  
OIL WELL  GAS WELL  OTHER Surface Impoundment

8. Well No.

2. Name of Operator  
Union Oil Company of California dba UNOCAL

9. Pool name or Wildcat  
South Vacuum Devonian

3. Address of Operator  
P.O. Box 3100 Midland, TX

4. Well Location  
Unit Letter I : 1980 Feet From The South Line and 660 Feet From The East Line  
Section 35 Township 18-S Range 35-E NMPM Lea County

10. Elevation (Show whether DP, RKB, RT, GR, etc.)  
3860' GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <u>Surface Impoundment Closure</u> <input type="checkbox"/>		OTHER: _____	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

UNOCAL proposes to delineate and then remediate an unlined surface impoundment known to contain levels of petroleum hydrocarbons at the South Vacuum Unit SWD. During delineation an assessment will be made to determine the extent of contamination below the surface and to the sides of the impoundment by sampling and field testing. After delineation, solidification material will be placed in the impoundment and the contamination will be mixed with solidification material until proper consistency is achieved, then remixed with added water to create an encapsulation reaction. Soil will then be placed over the area and the site will be revegetated. Vertical depth to ground water in this area is approximately 50'. There are no known private or domestic water wells in the area and the distance to any ponds, rivers or streams is in excess of 1000'. This gives the impoundment an overall ranking score of 20 points.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE HES Coordinator DATE 12-5-94

TYPE OR PRINT NAME Jimmy Mason TELEPHONE NO. (915-685-7600) 915/685

(This space for State Use) ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

JAN 03 1995

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



STATE OF NEW MEXICO  
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT DIVISION  
 OIL CONSERVATION DIVISION  
 HOBBS DISTRICT OFFICE '95 FEB 13 AM 8 52

POST OFFICE BOX 1980  
 HOBBS, NEW MEXICO 88241-1980  
 (505) 393-6161

**NMOCD Inter-Correspondence**

To: Jerry Sexton-District I Supervisor

From: Wayne Price-Environmental Engineer District I *Wayne Price*

Date: February 9, 1995  
 10:00 am

Reference: Unocal Pit Closure South Vacuum Unit  
 Unit I-Sec 35-18s-R35e

Subject: Monitor well results-analysis attached

**RECEIVED**  
 FEB 21 1995  
 Environmental Bureau  
 Oil Conservation Division

**Comments:**

Jim Mason with Unocal delivered the analytical results of the recent sampling events of the monitor well. After reviewing the results it appears that NM ground water standards have been exceeded, therefore I recommended that Mr. Mason contact Roger Anderson and notify him of the situation.

It appears the chlorides and TDS exceeded the standards. Also, there still appears to be a contaminated area just south of the pit where the monitor well was installed. Soil borings taken at 37-38 feet below surface in this area indicates a TPH level of 4926 ppm and at 50-51 feet it is 1,785 ppm. The top of the water table is approximately 58 feet below surface.

This area apparently was missed during the excavation. It is not known at this time the extent or magnitude of the remaining soil and ground water contamination.

Please note Unocal has initiated all of the remediation activities as of to date, and has been doing an excellent job. They have been very prompt in keeping us aware of their activities!

cc: Roger Anderson-Environmental Bureau Chief  
 Bill Olson-Hydrogeologist  
 Jim Mason-Unocal



**ENVIRONMENTAL**  
**LAB OF  , INC.**

"Don't Treat Your Soil Like Dirt!"

February 6, 1995

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

**RECEIVED**

FEB 6 9 1995

U C D HOBBS  
OFFICE

Sample Matrix: Water

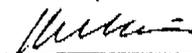
Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

Date Received: 1/27/95  
Analysis Date: 2/3/95

Parameter	Value (mg/l)	QC	% Accuracy	Detection Limit
Sample ID: 9501271040 MW-1				
Arsenic (As)	<0.1	10.7	107	0.1
Selenium (Se)	<0.2	2.1	105	0.2
Chromium (Cr)	<0.01	10.6	106	0.01
Cadmium (Cd)	<0.01	2.09	101	0.01
Lead (Pb)	<0.05	10.5	105	0.05
Barium (Ba)	<0.05	197	98	0.05
Silver (Ag)	<0.01	10.4	104	0.01
Mercury (Hg)	<0.001	0.022	95	0.001

Methods: EPA SW 846-3005, 6010, 7741.

Metals QC: 2.0 mg/L Cd, Se, ; 200 mg/L Ba; 10 mg/L As, Pb, Cr and Ag; and 0.005 mg/L Hg.

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

February 8, 1995

**RECEIVED**

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

FEB 09 1995  
OCD HOBBS  
OFFICE

Sample Matrix: Water

Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

Date Received: 1/27/95  
Analysis Date: 2/3/95

EPA 8270 Compounds (ppm)	Value (ppm)	Detection Limit	QC	%IA
Sample ID: 9501271100 MW-1				
Napthalene	ND	0.001	0.454	91

Surrogates	%Recovery
2-Fluorophenol SURR	106
Phenol-d5 SURR	104
Nitrobenzene-d5 SURR	88
2-Fluorobiphenyl	96
2,4,6-Tribromophenol SURR	105
Terphenyl-d14 SURR	128

Methods: EPA SW846-8270.

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 30, 1995

**RECEIVED**

FEB 09 1995  
OCD HOBBS  
OFFICE

GCL Environmental Sciences & Engineering  
Mr. Gilbert VanDeventer  
306 West Wall, Suite 818  
Midland, Texas 79701

Sample Matrix: Water

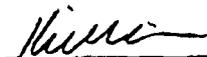
Project: Unocal, South Vacuum Unit  
Project Manager: Gilbert VanDeventer

Date Received: 1/27/95  
Analysis Date: 1/30/95

Compounds	Actual (ug/l)	Detection Limit (ug/l)	QC	%IA
Sample ID: 9501271045 MW-1				
Benzene	ND	1.0	80	80
Toluene	ND	1.0	82	82
Ethylbenzene	ND	1.0	83	83
Xylene (m,p)	ND	1.0	163	82
Xylene (o)	ND	1.0	83	83
Surrogate Spike	%Recovery			
a,a Trifluorotoluene	90			

QC= 100 ug/l BTE (o)X & 200 ug/l (m,p) X. Surrogate Spike=80 ug/l a,a,a Trifluorotoluene  
Methods: EPA SW 846-8020/5030

ND = Not Detected

  
Kirk Robinson

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"Don't Treat Your Soil Like Dirt!"

February 6, 1995

RECEIVED

FEB 09 1995  
OCD HOBBS  
OFFICE

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

Sample Matrix: Water

Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

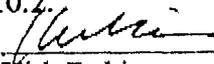
Date Received: 1/27/95

Analysis Date: 2/3/95

Sample ID: 9501271035 MW-1

	Conductivity (uS/cm)	pH (s.u.)	Chlorides (mg/L)	Sulfates (mg/L)	TDS (mg/L)	HCO <sub>3</sub> (mg/l)
	4,300	7.5	1,174	120	2,250	231
Quality Control ---		7.0	500	10	---	---
% Accuracy		100	100	100		

Methods: EPA-600/4-79-020 120.1, 150.1, 325.3, 375.4, 160.1, 310.2.

  
Kirk Robinson

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February 6, 1995

Unocal  
Mr. Jimmy Mason  
P.O. Box 3100  
Midland, Texas 79702

RECEIVED  
FEB 09 1995  
OCD HOBBS  
OFFICE

Sample Matrix: Water

Project: Unocal, South Vacuum Unit  
Project Manager: Jimmy Mason/Gilbert VanDeventer (GCL)

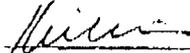
Date Received: 1/27/95

Analysis Date: 2/3/95

	Ca <sup>++</sup> (mg/L)	Mg <sup>++</sup> (mg/L)	Na <sup>+</sup> (mg/L)	K <sup>+</sup> (mg/L)
9501271035 MW-1	297	35.3	674	13.5
Quality Control -----	19.1	21.6	19.8	53.4
% IA	97	108	99	107

QC: Ca<sup>++</sup> 20 mg/L, Mg<sup>++</sup> 20 mg/L, Na<sup>+</sup> 20 mg/l, K<sup>+</sup> 50 mg/L

Methods: EPA-600/4-79-020 215.1, 242.1, 273.1, 258.1.

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 30, 1995

GCL Environmental Sciences & Engineering  
Mr. Gilbert VanDeventer  
306 West Wall, Suite 818  
Midland, Texas 79701

RECEIVED

FEB 09 1995

UCD HOBBS  
OFFICE

Sample Matrix: Soil

Project: Unocal, South Vacuum Unit  
Project Manager: Gilbert VanDeventer

Date Received: 1/27/95

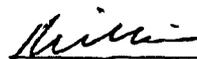
Analysis Date: 1/30/95

Compounds	Actual (mg/kg)	Detection Limit (mg/kg) OC		%IA
<b>Sample ID: 9501251155 MW-1 (37-38')</b>				
Benzene	ND	0.1	0.080	80
Toluene	0.66	0.1	0.082	82
Ethylbenzene	0.26	0.1	0.083	83
Xylene (m,p)	2.50	0.1	0.163	82
Xylene (o)	2.56	0.1	0.083	83
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a,a Trifluorotoluene	108			

<b>Sample ID: 9501251545 MW-1 (50-51')</b>				
Benzene	ND	0.1	0.080	80
Toluene	0.49	0.1	0.082	82
Ethylbenzene	0.20	0.1	0.083	83
Xylene (m,p)	1.03	0.1	0.163	82
Xylene (o)	2.40	0.1	0.083	83
<u>Surrogate Spike</u>	<u>%Recovery</u>			
a,a,a Trifluorotoluene	100			

QC= 100 ppb BTE (o)X & 200 ppb (m,p) X. Surrogate Spike=5 ppm a,a,a Trifluorotoluene  
Methods: EPA SW 846-8020/5030

ND = Not Detected

  
Kirk Robinson

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

January 30, 1995

**RECEIVED**

GCL Environmental Sciences & Engineering  
Mr. Gilbert VanDeventer  
306 West Wall, Suite 818  
Midland, Texas 79701

FEB 09 1995  
UCD HOBBS  
OFFICE

Sample Matrix: Soil

Project: Unocal, South Vacuum Unit  
Project Manager: Gilbert VanDeventer

Date Received: 1/27/95  
Analysis Date: 1/30/95

Parameter	Value	Units	EPA SW-846 Test Method
Sample ID: 9501251155 MW-1 (37-38')			418.1/3550
Total Petroleum Hydrocarbons	4,926	mg/kg	
Sample ID: 9501251545 MW-1 (50-51')			
Total Petroleum Hydrocarbons	1,785	mg/kg	
<hr/>			
QC (Quality Control)			
Total Petroleum Hydrocarbons QC:	145 ppm		
Detection Limit	10 mg/kg		
	<u>Result</u>	<u>% IA</u>	
TPH	147 ppm	101	

  
Kirk Robinson

STATE OF NEW MEXICO  
NMOCD District I

GIL CONSERVATION DIVISION  
RECEIVED

'95 JAN 26 AM 8 52

INTER-OFFICE MEMO

To file: Unocal

Date: Jim Mason  
Time: 8:15 am

1/24/95

Telephone call: X Meeting:      Other:     

Person called or attending:

Jim Mason-

REFERENCE: Pit Closure-South Vacuum Unit near Buckeye NM  
unit I 35-18s-35e

Subject: Progress report

Comments:

Jim Mason indicated they are complete with the solidification project and they are going to drill a monitor well starting Wednesday morning 1/23/95. He indicated they plan to drill 10' into the water table. They will use a 2" pvc with 15' of screen. Ten feet in and 5' out. They will sand/gravel pack with a bentonite plug set above.

They plan to develop well and pull 5 well volumes and sample water. If water analysis turns out ok then they will come back and pull pipe and fill hole from bottom to top with cement with 5% bentonite

I informed Mr. Mason that the NMOCD is not requiring him to drill a monitor well, he understood this and indicated that Unocal wants to make sure they are leaving a clean site for future liability reasons.

Wayne Price   
NMOCD Environmental Engineer-District I  
cc: Jerry Sexton-District I Supervisor  
Roger Anderson-Environmental Bureau Chief

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FEB 21 1995

Environmental Bureau  
Oil Conservation Division

OIL CONSERVATION

REC'D

1995 FEB 21

STATE OF  
NEW MEXICO  
OIL  
CONSERVATION  
DIVISION



MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time

~~2:00 PM~~

Date

2/15/95

Originating Party

Other Parties

JIM MASON - MNSCAL

Subject

PIPE CLOSURE - 5 VAC UNIT Buckeye NM  
UNIT I 560 35-185-135e

Discussion

CALLED + INFORMED ME THAT THEY  
WILL BE ON SITE TO COMPLETE  
MONITOR WELL INSTALLATION FOR  
FUTURE USE.

Conclusions or Agreements

WILL CEMENT/3-5% BENTONITE AROUND 2" PVC  
PIPE TO SURFACE, WILL INSTALL PAD, WELL PROTECTOR  
PIPE & LOCK!

Distribution

cc: BILL OLSON  
JERRY BRYTON

Signed

# Memo

*From*

**ROGER ANDERSON**  
*Environmental Engineer*

*To Bill*

*Jim Mason UNOCAL*

*Pit closure west of Hobbs  
has Cl contamination*

*915-685-6890*