

# AGENDA



62nd WIPP QUARTERLY REVIEW MEETING  
April 30, 1998

Department of Energy  
Skeen-Whitlock Building  
4021 National Parks Highway  
Carlsbad, NM 88220  
505-234-7303

9:30 a.m.	Welcome and Opening Remarks	10 min.	George Dials, CAO
9:40 a.m.	Environmental Evaluation Group Status/Activity Report	30 min.	Robert Neill, Director, EEG
10:10 a.m.	NMED DOE Oversight Status/Activity Report	15 min.	Steve Zappe, NMED
10:25 a.m.	NMED Haz/Rad Materials Status/Activity Report	15 min.	Steve Zappe, NMED
10:40 a.m.	N.M. Radioactive Waste Task Force Status/Activity Report	20 min.	Chris Wentz, NMEMNRD
11:00 a.m.	U.S. Department of Energy Status/Activity Report	30 min.	George Dials, CAO
11:30 a.m.	LUNCH	90 min.	
1:00 p.m.	Summary of ORR Review	20 min.	Wayne Walker, CAO
1:20 p.m.	EEG-67: Pre-operational Radiation Surveillance by EEG, 1993-1995	10 min.	Jim Kenney, EEG
1:45 p.m.	EEG-68: Comments on EPA Proposed Rule	40 min.	EEG
2:10 p.m.	Site Certification Audit Update	30 min.	Butch Stroud, CAO
2:40 p.m.	BREAK	15 min.	
2:55 p.m.	TRU Waste Characterization/Certification	30 min.	Kent Hunter, CAO
3:25 p.m.	HALFPACK Tests	20 min.	Mike Brown, CAO
3:45 p.m.	Schedule for WIPP Opening and 1998 Shipments	20 min.	George Dials, CAO
4:05 p.m.	Open discussion period	20 min.	All
4:25 p.m.	Action Item Commitments/Closeouts	15 min.	Pat Kilgore, CAO
4:40 p.m.	Adjourn		

Rev. 3, 4/28/98

980426



DOE OB

Tom left, 4 vacancies

Resume WIPP involvement when waste receipt begins.

- other facilities (LANL, SNL) more pressing

NMED -

WIPP inspection - LOV <sup>2/5</sup> (1 haz worker - training issue)  
response 2/12

Application revision verification - all copies verified as updated.

Santa Fe Bypass - road trip/video

Draft Permit - focused, on target, etc

Jokes

Size

Availability - various public locations, web page

EPA review of prelim draft.

Received copies of maps, figures, etc from WID

No <sup>other</sup> info - everything will become clear upon release

Gross estimates of date

Share - photo



## ENVIRONMENTAL EVALUATION GROUP

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

7007 WYOMING BOULEVARD, N.E.  
SUITE F-2  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 828-1003  
FAX (505) 828-1062

# LXII QUARTERLY MEETING

**U.S. Department of Energy  
N.M. Energy Minerals and Natural Resources Dept.  
N.M. Environmental Evaluation Group  
N.M. Environment Department  
N.M. Attorney General**

**Robert H. Neill**

**April 30, 1998  
Carlsbad**

## **Published Reports**

- EEG-65**      **Probability of Failure of the Waste Hoist Brake System at the Waste Isolation Pilot Plant (WIPP), January 1998**
- EEG-66**      **Individual Radiation Doses from Transuranic Waste Brought to the Surface by Human Intrusion at the WIPP, February 1998**
- EEG-67**      **Preoperational Radiation Surveillance of the WIPP Project by EEG During 1993 through 1995, March 1998**
- EEG-68**      **Evaluation of the WIPP Project's Compliance with the EPA Radiation Protection Standards for Disposal of Transuranic Waste, March 1998**
- EEG-69**      **Sensitivity Analysis of Performance Parameters used in Modeling the Waste Isolation Pilot Plant, May 1998**
- EEG-70**      **EEG Observations of the March 1998 WIPP Operational Readiness Review Audit, May 1998**

## **Selected Outstanding Issues**

- **Request to DOE re method of resolving EEG comments on WAC as required in DOE order 5820.2A**
- **Status of establishing radiochemical analytical capability at site (EEG-70)**
- **Additional operational readiness concerns**
- **EEG requests to address inflow of water at exhaust shaft**
- **Recent sharp increase in rising water levels in Culebra north of site**

## **DOE Order 5820.2A Chapter II 3c**

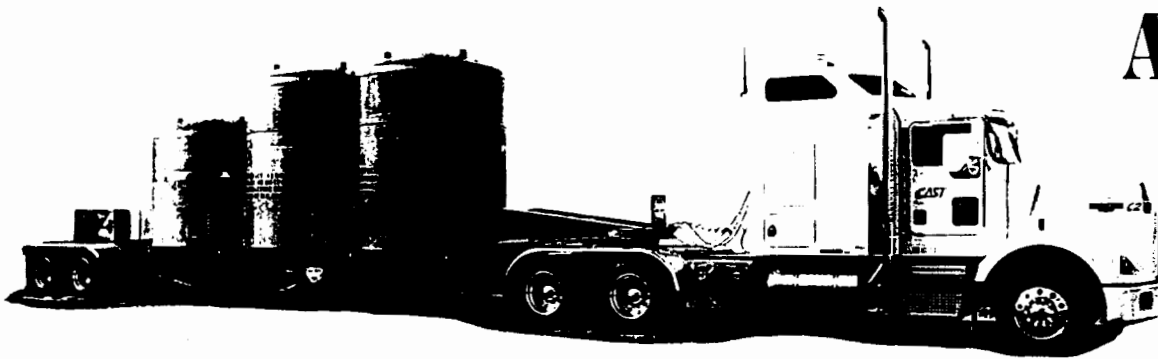
- (6) The Waste Isolation Pilot Plant-Waste Acceptance Criteria Certification Committee shall submit Certification and associated quality assurance plans to the state of New Mexico's Environmental Evaluation Group for review and comment prior to granting formal approval of such plans**
- (7) The Environmental Evaluation Group's comments on certification and associated quality assurance plans shall be resolved between the affected site and the Waste Isolation Pilot Plant-Waste Acceptance Criteria Certification Committee prior to granting formal approval of the plans.**

- **Status of national TRU Management Program**
  - **Buried TRU wastes**
    - **Update of inventory**
    - **Migration of actinides**
    - **LANL cleanup decision scheduled for 2008**
      - Stored TRU Am-241 9113 Ci**
      - Buried TRU Am-241 5970 Ci**
  
- **Petition to NRC to eliminate 10 CFR 71.63 double containment and liquid Pu transportation requirements**
  
- **Status of variance request to permit Pu shipments with concentrations ~~exceeding~~<sup>up to</sup> 10% Pu (Level D Safeguard Limits)**
  
- **Changing existing CH-TRU waste inventories**

# 62nd WIPP Quarterly Review

**Carlsbad, New Mexico**

**April 30, 1998**



George E. Dials, Manager

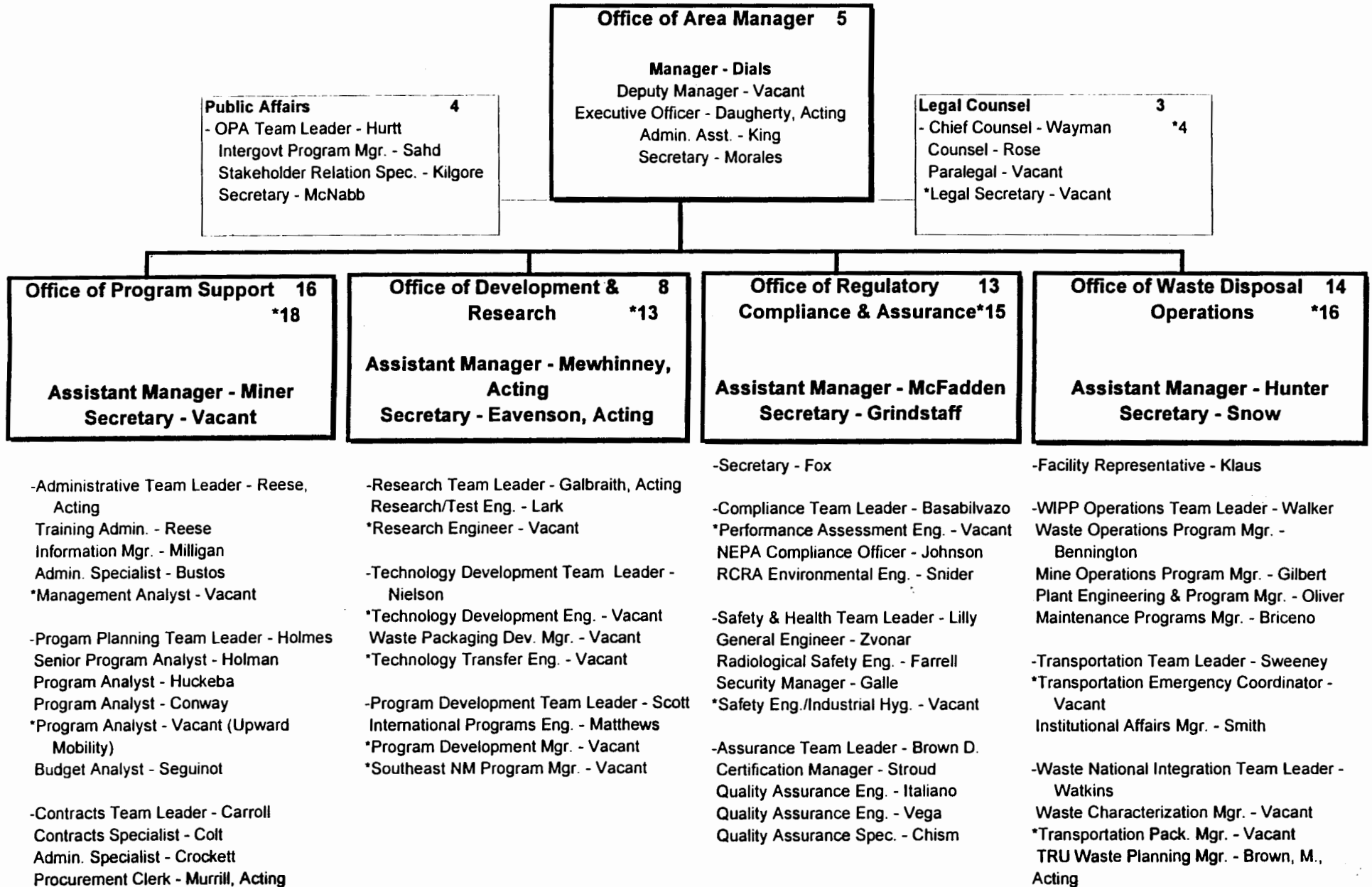
Carlsbad Area Office

United States  
Department of Energy





# Carlsbad Area Office



\*Authorization Under Development

# CARLSBAD AREA OFFICE BUDGET PROFILE

## *Fiscal Year 1999 President's Budget*

<i>Project</i>	<i>(Thousands)</i>				
	<i>FY97</i>	<i>FY98</i>	<i>FY99</i>	<i>\$ Change</i>	<i>% Change</i>
CAO - 1 WIPP Base Operations	\$100,058	\$ 98,700	\$105,743	+7,043	+7%
CAO - 2 Disposal Phase Certifications/ Experimental Programs	46,113	41,647	36,178	-5,469	-13%
CAO - 3 Transportation	14,196	8,982	20,263	+11,281	+126%
CAO - 4 TRU Waste Sites Integration and Preparation	28,458	24,537	22,007	-2,530	-10%
Total	\$188,825	\$173,866	\$183,591	+9,725	+6%
CAO-6 TRU Waste Transportation Privatization		21,000	19,605	-1,395	-7%
CAO Program Totals	\$188,825	\$194,866	\$203,199	+11,125	+6%



# NEW MEXICO ORGANIZATIONS RECEIVING FUNDS FROM DOE FOR OVERSIGHT, TECHNICAL REVIEWS, AND ANALYSES OF THE WIPP PROGRAM

Organization	Scope	Funds
Environmental Evaluation Group	Technical Review	\$1,748,000 FY98 \$1,355,000 FY99
New Mexico Energy, Minerals and Natural Resources Department	Emergency Response	\$1,095,000 FY98 \$923,000 FY99
New Mexico Environment Department Agreement in Principle (AIP)	Environmental Monitoring and Technical Review	Approximately \$3,000,000 each FY
Western Governors' Association (New Mexico's share) *	Transportation, Safety, and Emergency Preparedness	*\$15,000 FY98 *\$5,000 FY99
Carlsbad Environment Monitoring and Research Center (CEMRC)	Environmental Monitoring and Technical Review	\$3,809,000 FY98 \$4,120,000 FY99
Department of Development Training Center	Provides TRU-related training to DOE	\$0 FY98 \$0 FY99
New Mexico Impact Assistance	Land Withdrawal Amendment Act for Roads	\$20,000,000 FY98 \$20,000,000 FY99

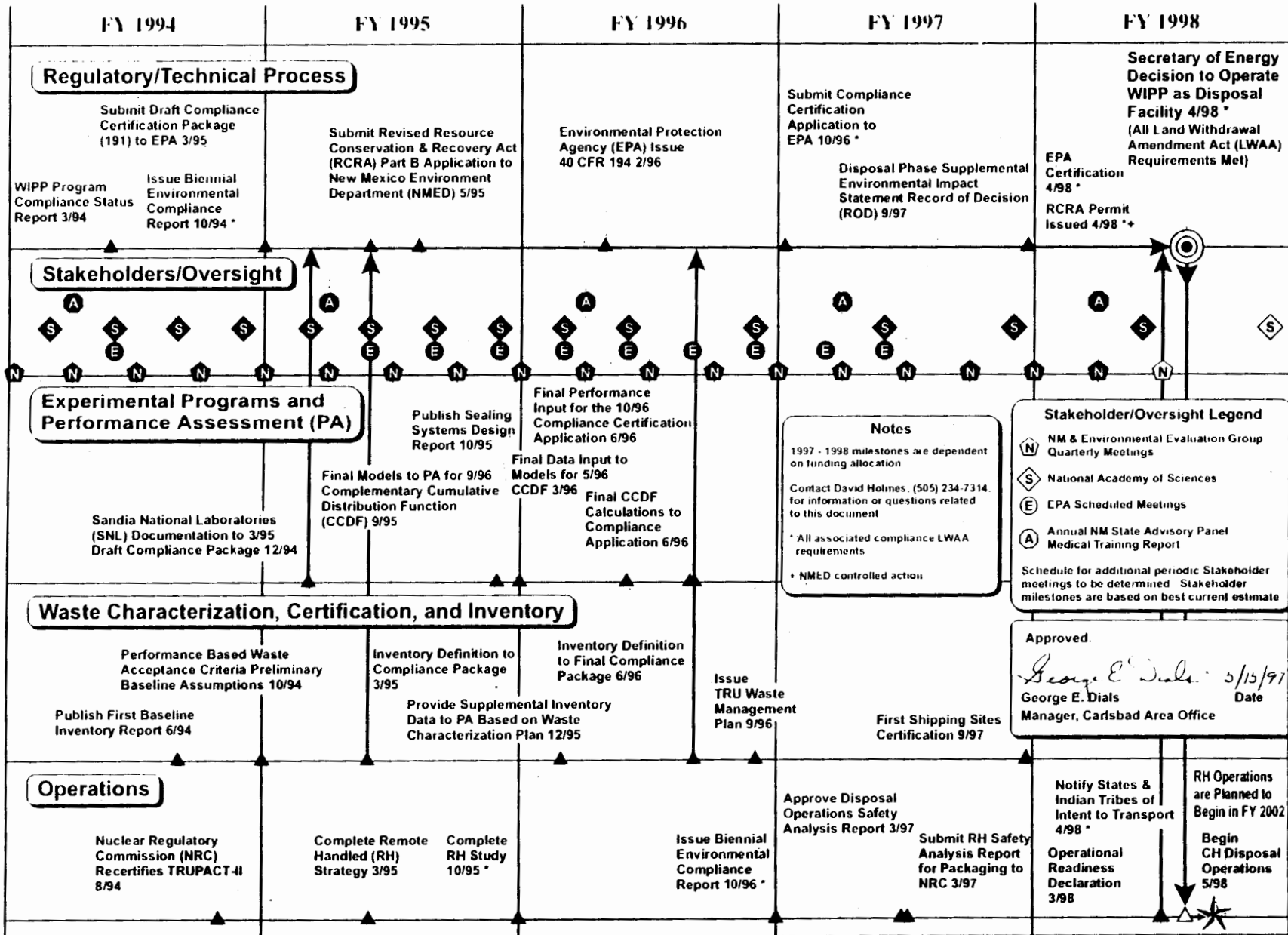
*\* State of New Mexico portion of approximately \$1.2 million budgeted for WGA*

**Total Funding -- \$29,667,000 FY98  
\$29,403,000 FY99**



# WIPP Disposal Decision Plan

Revision 4  
 May 15, 1997  
 Updated 4/9/98



# WIPP SCHEDULE

- Operational Readiness Review declaration *1998*  
*March*
- EPA certification *April*
- Energy Secretary's decision *April*
- Notify states and tribes of intent to transport *April*
- Disposal operations begin *May*
- Resource Conservation and Recovery Act  
Permit Part B *October*



# Non-Mixed Waste For Disposal at WIPP

	FY 98	FY99
Sites	Shipments	Shipments
INEEL	1	9
LANL	17	23
RFETS	15	151
Total	33	183



# REMAINING STEPS

- EPA certification
- Secretary's decision
- WIPP opens
- RCRA permit



***SHIFT HAPPENS !***



491R-5135a



### WIPP Operational Readiness

Wayne Walker - CAO  
62nd WIPP Quarterly Review Meeting  
April 30, 1998

### Readiness Requirements

- DOE O 425.1, STARTUP AND RESTART of NUCLEAR FACILITIES
- Operational Readiness Review required for the initial startup of a hazard category 2 facility
- Startup approval authority delegated from the Secretary to the CAO Manager

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### Components of WIPP Readiness

- Line Management Assessment
- Integrated Facility Checkout
- Continued Operational Mode
- Line Management Assessment Verification
- Performance Dry Run
- Contractor ORR
- DOE ORR
- Declaration of Readiness

### Line Management Assessment

- 7/29/96 - 7/21/97
- Matrix - Criteria vs. departments/systems
- 1165 Affidavits
- Prepared by department manager
- Approved by senior management
- 447 pre-start findings
- All (but 1) pre-start findings closed

↳ RCRA PCB Permit.

### Integrated Facility Checkout

- 4/1/97 - 4/30/97
- WIPP placed in "operational mode"
- Gate-to-salt waste handling
  - radiological controls
  - facility in mode compliance per SAR/TSR
  - compliance with RCRA permit application
  - extensive drills

### Continued Operational Mode

- 7/1/97 - 10/17/97
- Approximately 3 weeks per month
- Emphasis on identifying and resolving problems of keeping the plant and operation in mode compliance

### Line Management Assessment Verification

- 9/2/97 - 10/17/97
- Verify selected sample of LMA affidavits
- Ensure that closed affidavits remained closed

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### Performance Dry Run

- 9/8/97 - 9/19/97
- Full-cycle demonstration
- WWIS data from INEEL
- Transportation - INEEL to WIPP
- Emplacement with backfill at WIPP
- WWIS data update
- Successful performance in all areas

8

### Contractor ORR

- 1/12/98 - 1/23/98
- Results
  - 15 pre-start findings
  - 23 post-start findings
- Pre-start corrective actions completed and verified by 2/24/98

9

### DOE ORR

- 3/2/98 - 3/6/98
- Results
  - 6 pre-start findings
  - 16 post-start findings
- Conclusions
  - Upon closure of pre-start findings and approval of the CCA by the EPA, WIPP is ready to receive TRU waste
  - Upon receipt of RCRA permit, WIPP is ready to receive mixed-TRU waste.

10

### DOE ORR

- Pre-start findings closed and verified by 3/25/96
- CAO Manager issued Readiness to Proceed with WIPP Disposal Operations memo to Secretary on 3/26/98

11

### Remaining Actions

4/30/98

- Post-start findings
  - 9 closed and verified
  - 8-2 closed pending verification
  - 22-27 open post-start findings

12

# EEG Comments on the EPA's Proposed Rule for WIPP

62nd WIPP Quarterly Review Meeting

Carlsbad

April 30, 1998

# Outline of EEG-68

- Containment Requirements: Site Characterization, Sensitivity Analysis, Actinide Solubility, Spallings, Air Drilling, Fluid Injection, Anhydrite Fracturing, Solution Mining, Culebra Transport, Probability of Brine Reservoirs, Waste Characterization
- Assurance Requirements: Institutional Controls, Monitoring, Engineered Barriers, Resource Disincentive, Retrievability
- Groundwater Protection Requirements
- Individual Protection Requirements

# Dewey Lake Redbeds Hydrology- Information in the CCA

- “The Dewey Lake contains a productive zone of saturation, probably under water-table conditions, in the southwestern to south-central portion of the WIPP site and south of the site.” (CCA, 2.2.1.4.2.1)
- “The Dewey Lake has not produced water within the WIPP shafts or in boreholes in the immediate vicinity of the panels.” (CCA, 2.2.1.4.2.1)
- “The DOE assumes that chemical retardation occurring in the Dewey Lake will prevent release within 10,000 years of any actinides that might enter it” (CCA 6.4.6.6)
- “The units overlying the Dewey Lake...are thin and predominantly unsaturated at the WIPP site...” (CCA, 6.4.6.7)

# DLR Hydrology-Post CCA Information

(From DOE/WIPP 97-2219, January, 1997)

- “The data obtained from the installation, sampling, and testing associated with wells C-2505, C-2506, and C-2507 indicate that a water-saturated horizon is present in the lower Santa Rosa/upper Dewey Lake Formations in the depth range where water is leaking into the exhaust shaft (50 to 100 feet bgs).” (p. 23)
- “A long-term pumping test, 1-to-7 days in length, or longer, would help to determine if wells C-2505 and C-2506 are sufficient as a dewatering mechanism, or if additional wells may be required to stop seepage through the shaft liner...If significant dewatering occurs during testing, noted by head values not returning to pre-pumping test conditions, then the water-bearing unit may be limited in extent. On the other hand, if head values do return to near pumping-test conditions, then the areal extent of the water-bearing horizon may be large enough to warrant further hydrologic investigations.” (p. 24)

## DLR Hydrology-Post CCA Information (From DOE/WIPP 97-2278, January 1998)

- “During the February 1997, 24-hour C-2505 step-drawdown pumping test, measurable fluid pressure responses were observed in both observation wells, C-2506 and C-2507. However, the magnitude of the response in C-2507, 197 feet away from C-2505 was almost twice the magnitude of the response in the observation well C-2506, 34 feet away from C-2505, suggesting some type of connection.” (p. 7)
- “In both wells the total dissolved solids (TDS) concentration were less than observed in October, 1996. In C-2506 the TDS decreased from about 11500 to 6000 MG/L, while in C-2505 the TDS decreased from about 8500 to 4500 MG/L.” (p.7)
- “Test data indicated that the wells nearest the Exhaust shaft were capable of sustaining water production in the range of 0.3 to 0.6 gallons per minute for a period of 24 hours or longer.” (p.1)

## DLR Hydrology-Post CCA Information (From DOE/WIPP 97-2278, Contd.)

- “Tests indicate that the maximum sustainable pumping rate is approx. 2.0 gpm at PZ-12. The minimum sustainable pumping rate is approximately 0.2 gpm at PZ-2. The average sustainable pumping rate for the wells and the piezometers is about 0.6 gpm.” (p. 66)
- “Of the twelve piezometers and three wells installed at WIPP between September 1996 and August 1997, only PZ-8 is dry. In every other monitoring well water is present....It is also likely that the saturated area is significantly larger than the present 80-acre investigative area, but in order to clearly define the area extent of water within the Santa Rosa Formation additional boreholes would have to be drilled.” (p. 69)



## Summary of EEG Concerns on DLR Hydrology

- CCA states that the DLR and Santa Rosa Formations have not produced water within the WIPP shafts or in boreholes in the immediate vicinity of the panels. The January 1998 DOE report says that in the whole 80 acre area containing the shafts and other WIPP buildings, the lower Santa Rosa/upper DLR is saturated and may be so beyond the area of investigation. Shouldn't CCA be corrected?
- The well WQSP-6 unexpectedly encountered water in the DLR in October 1994. WQSP-6a was completed in the DLR, was pumped for three days at 12 gpm , and transmissivity of  $5 \times 10^{-4} \text{ m}^2/\text{s}$  was calculated (Beauheim presentation at the 11/26/96 Quarterly Mtg.). The CCA uses  $T=5 \times 10^{-8} \text{ m}^2$  for the DLR. Why?
- Water quality in the Santa Rosa/DLR wells near the shafts has changed drastically in four months between October 1996 and February 1997. Why? What is the trend since February 1997?

# Culebra Water Level Rises

- Sudden water level rises in the Culebra aquifer in wells DOE-2, H-6b, H-18, WIPP-12, WIPP-13, WIPP-30, WQSP-1 and WQSP-2, all located in the northern part of the WIPP site, have been observed since January 1998. Why? Until now such dramatic water level changes were confined to the south of the site.

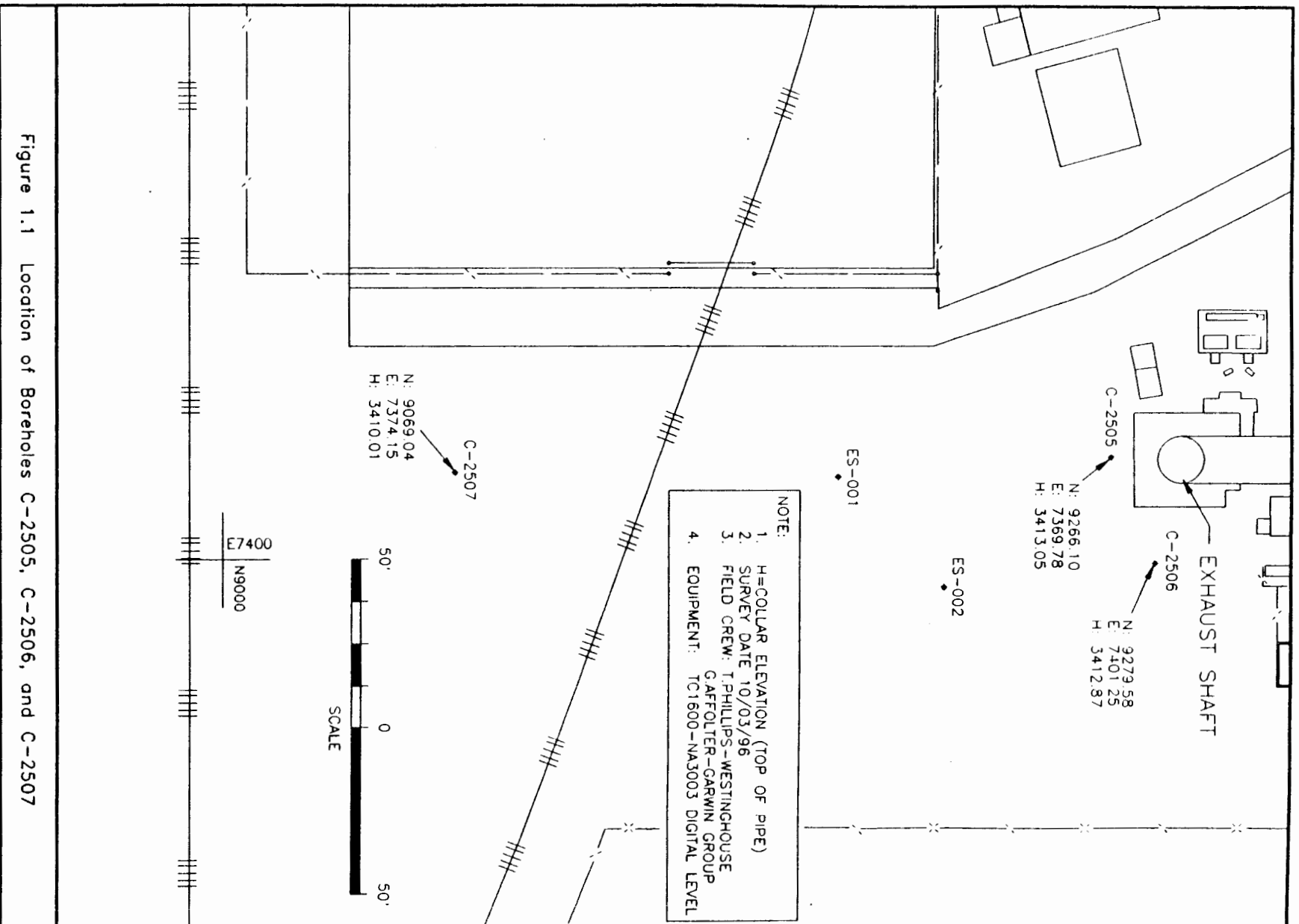
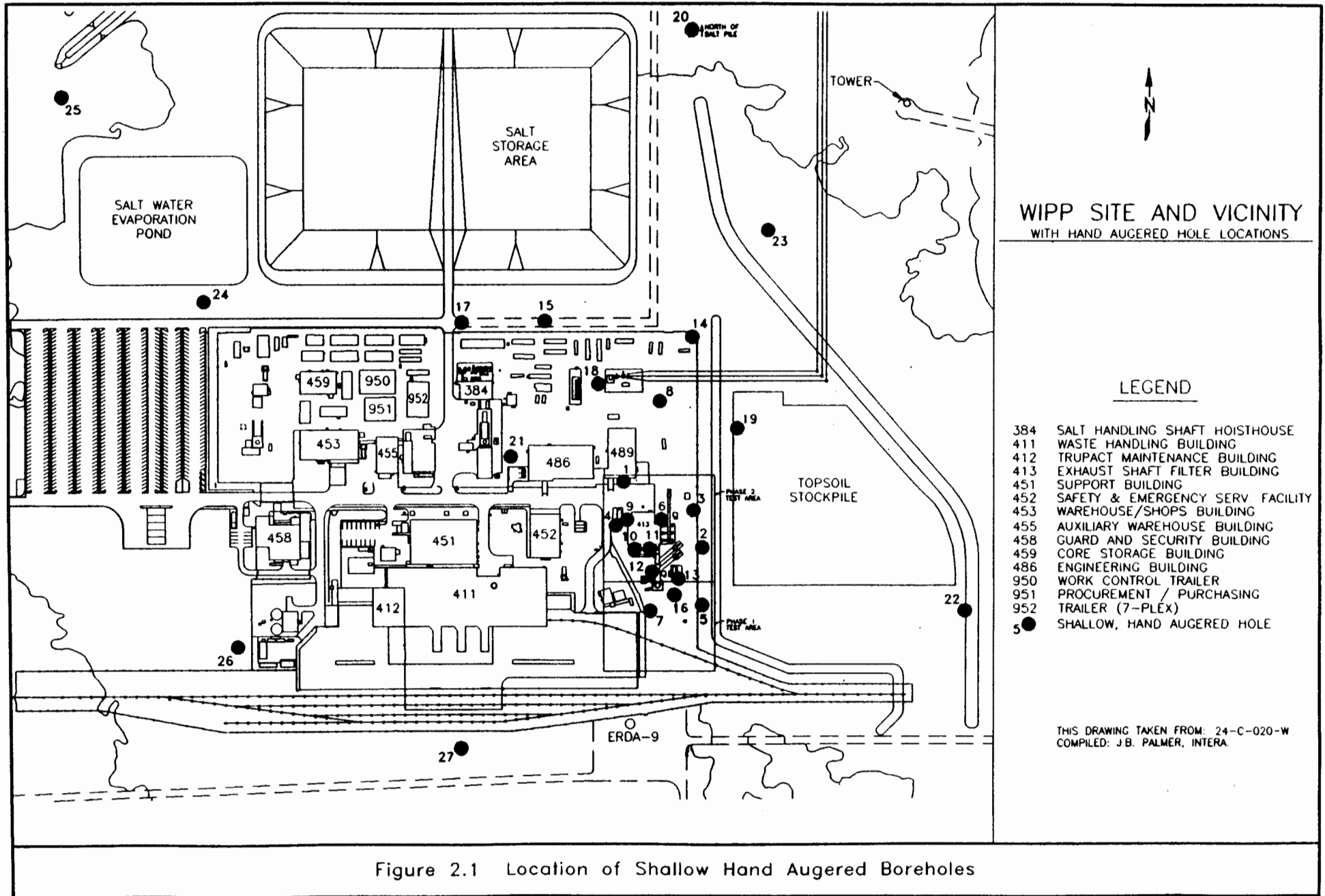


Figure 1.1 Location of Boreholes C-2505, C-2506, and C-2507



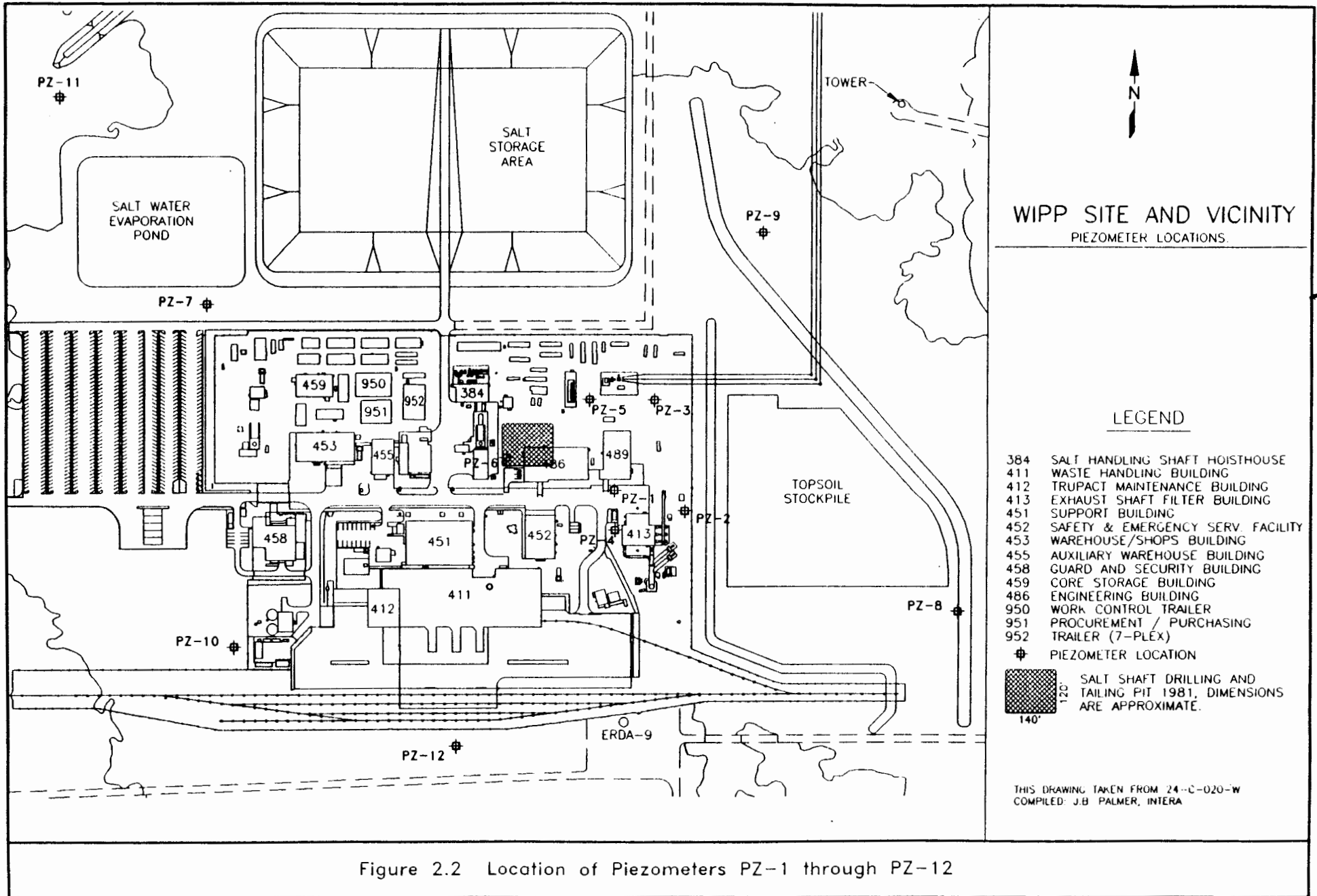


Figure 2.2 Location of Piezometers PZ-1 through PZ-12

# Exhaust Shaft Hydraulic Assessment

C-2505

28

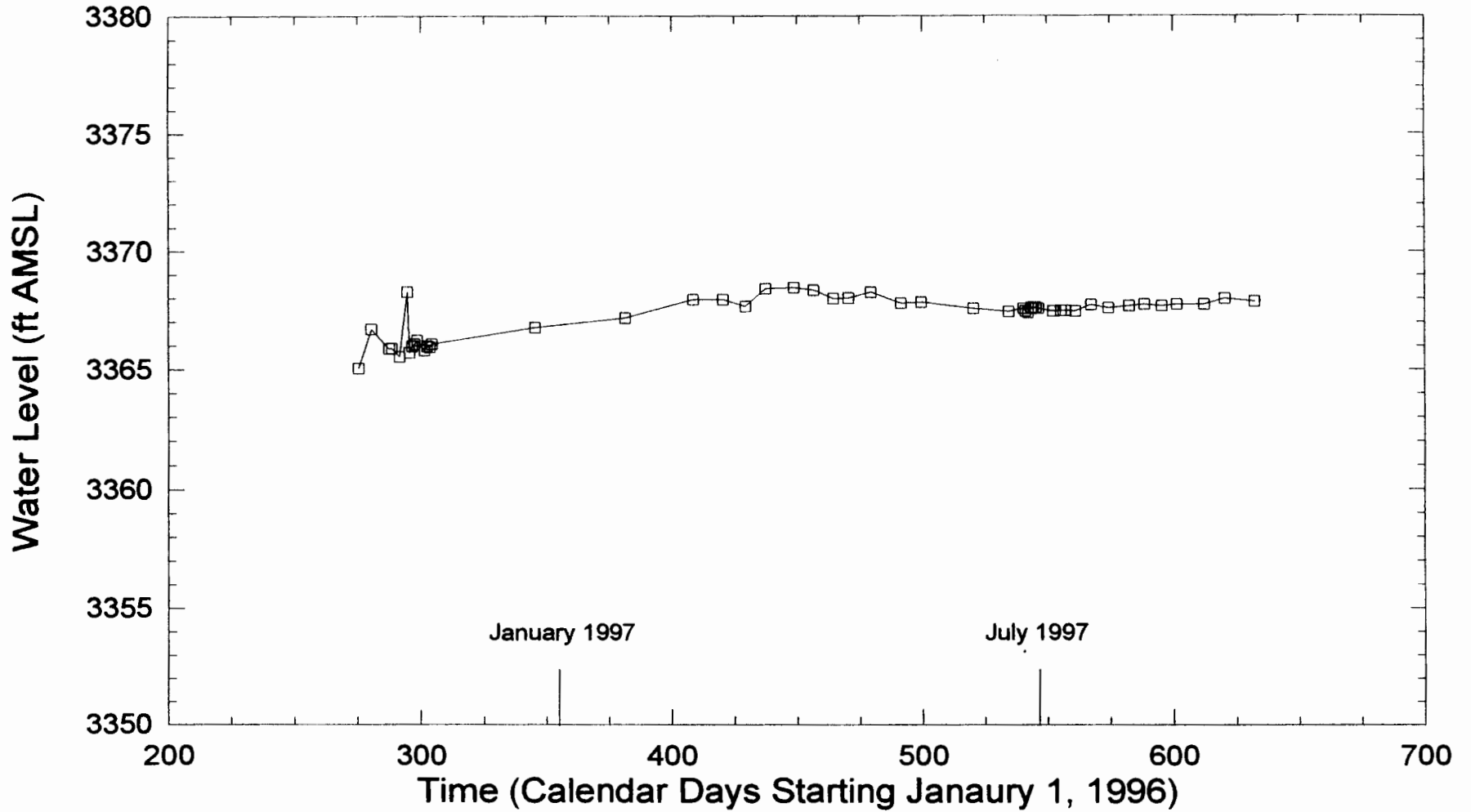


Figure 3.1. Water level versus time for monitor well C-2505

# Exhaust Shaft Hydraulic Assessment

C-2506

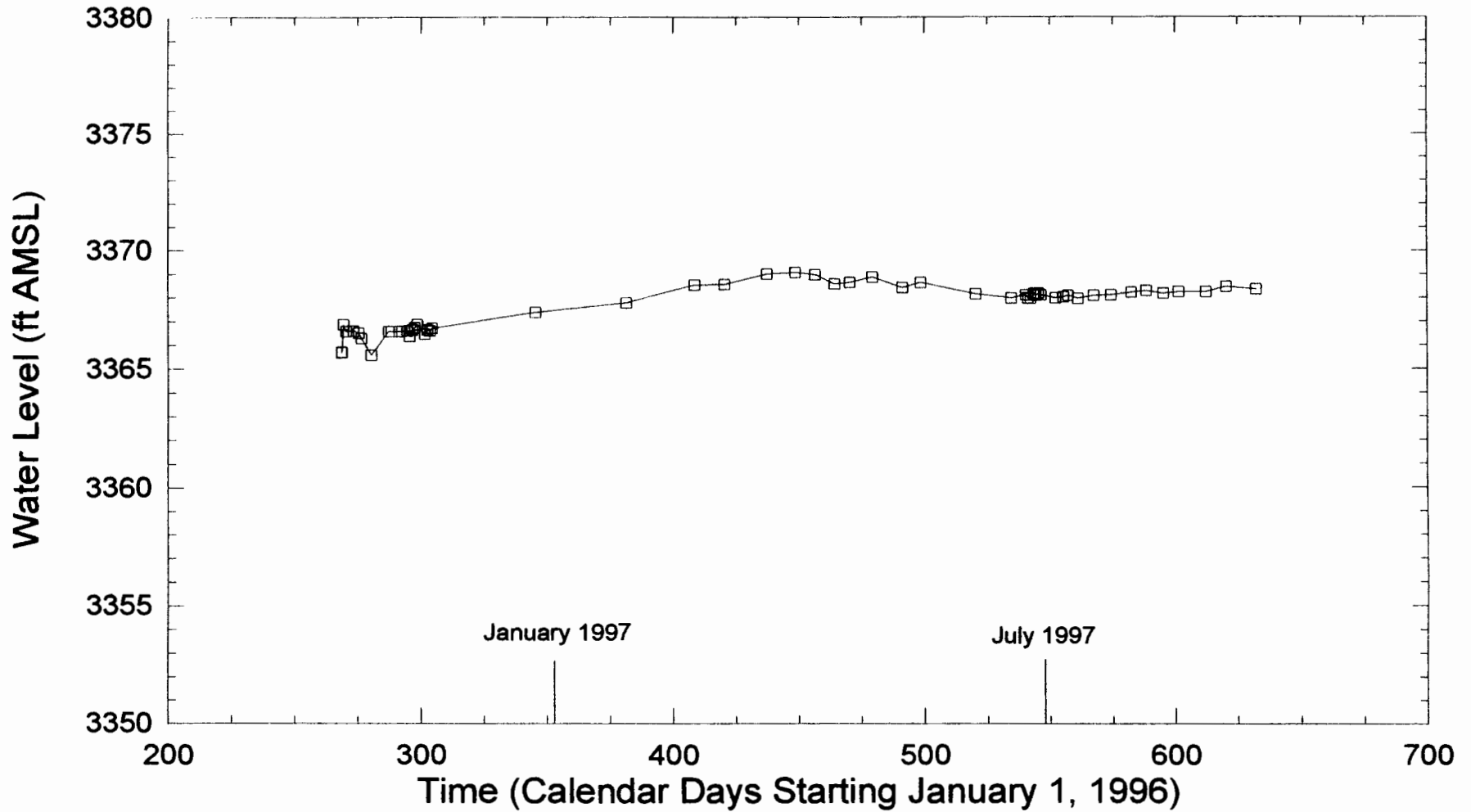


Figure 3.2. Water-level versus time for monitor well C-2506

# Exhaust Shaft Hydraulic Assessment

C-2507

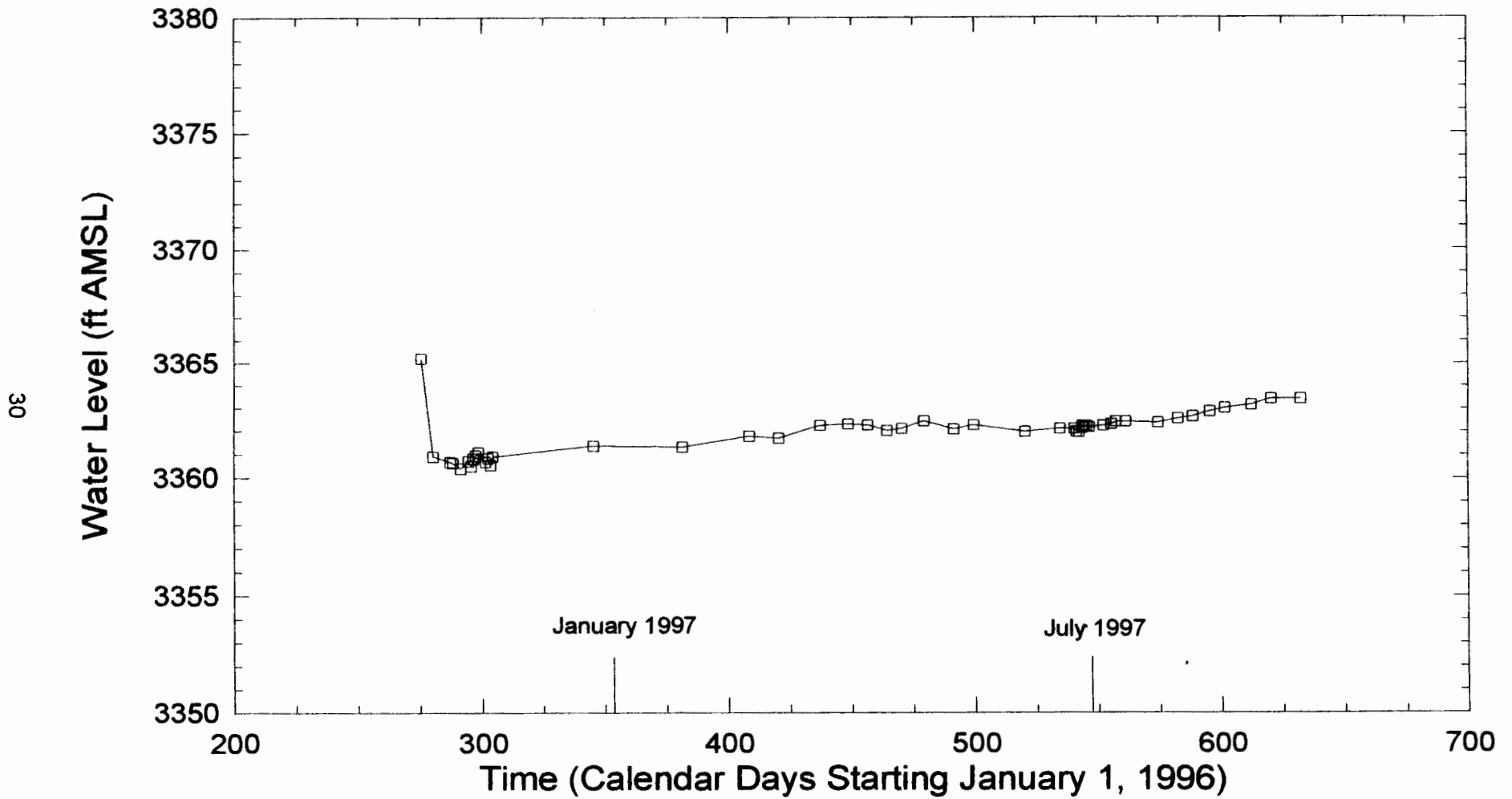
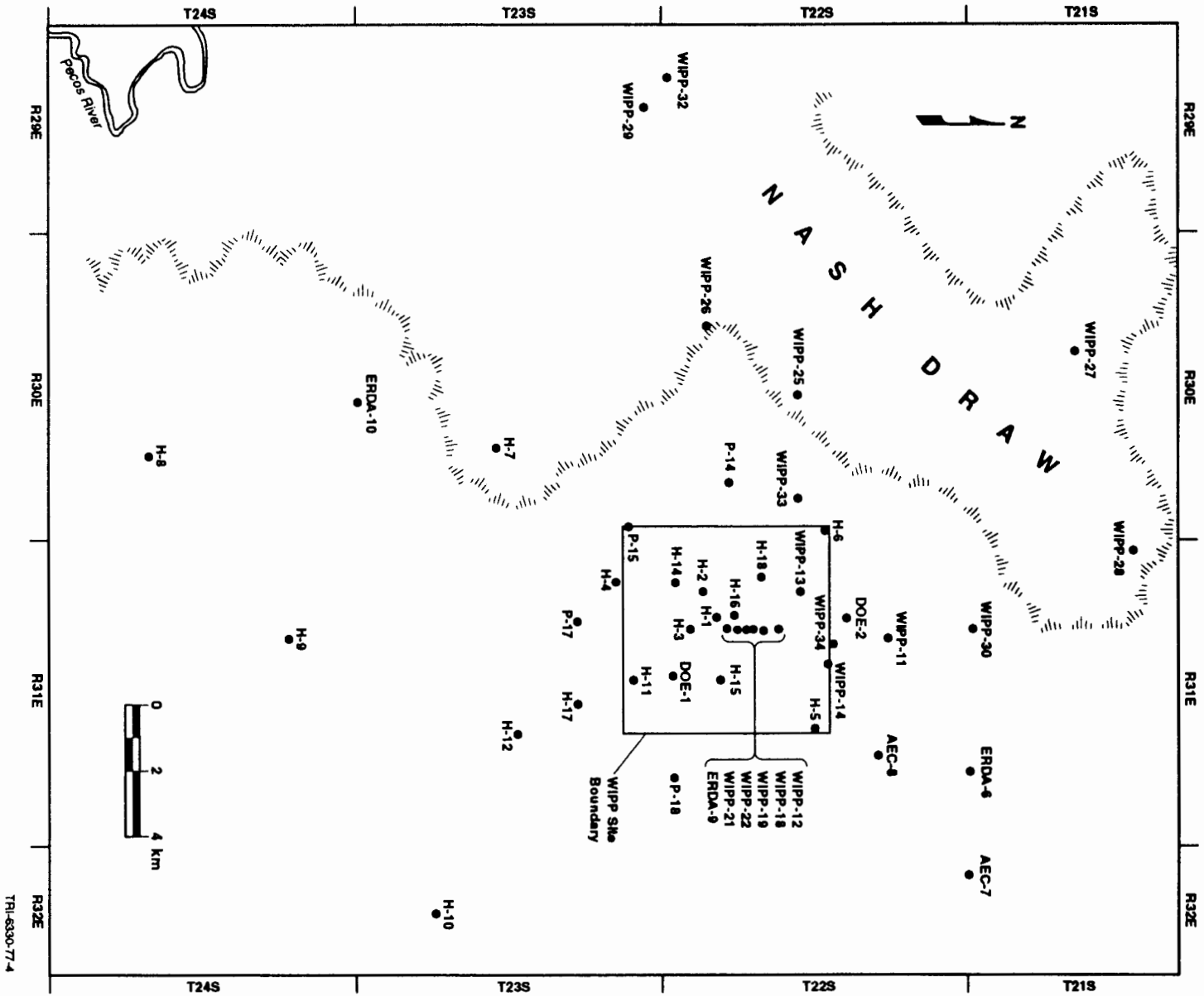
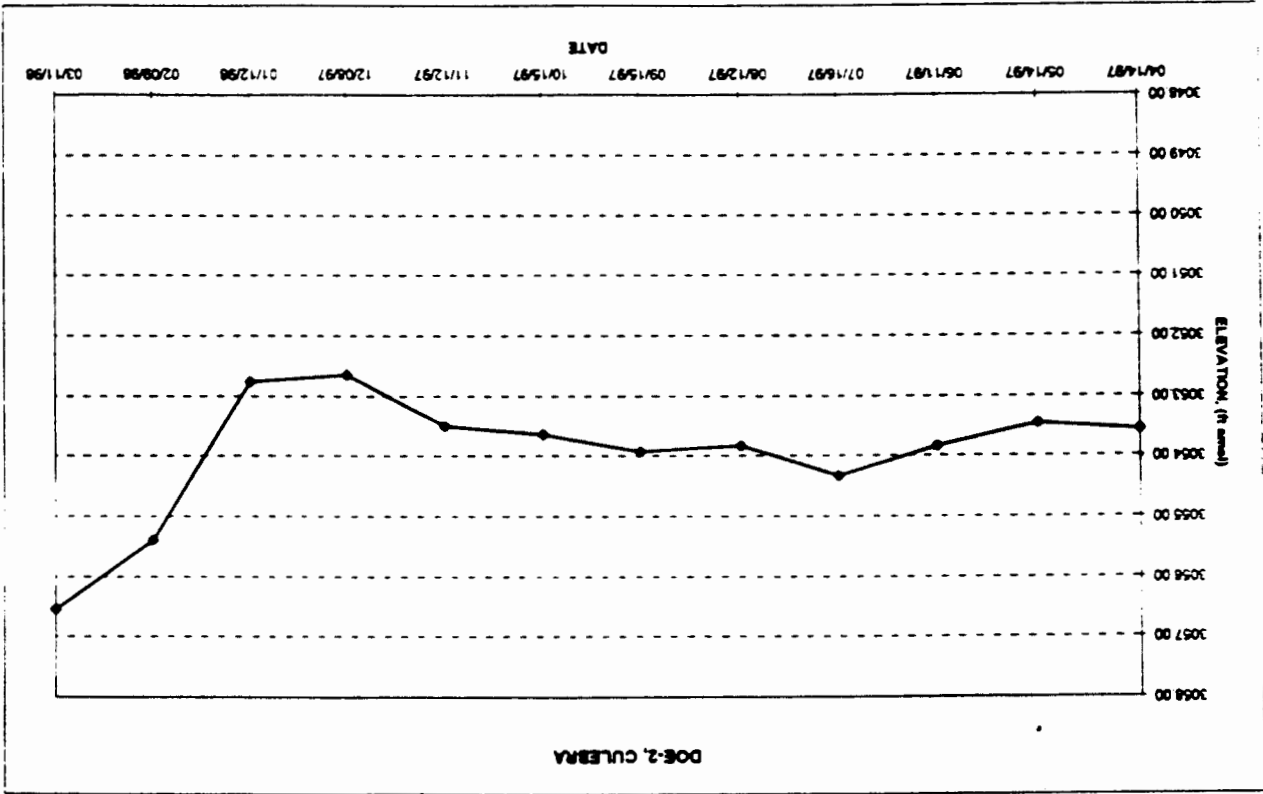


Figure 3.3. Water-level versus time for monitor well C-2507



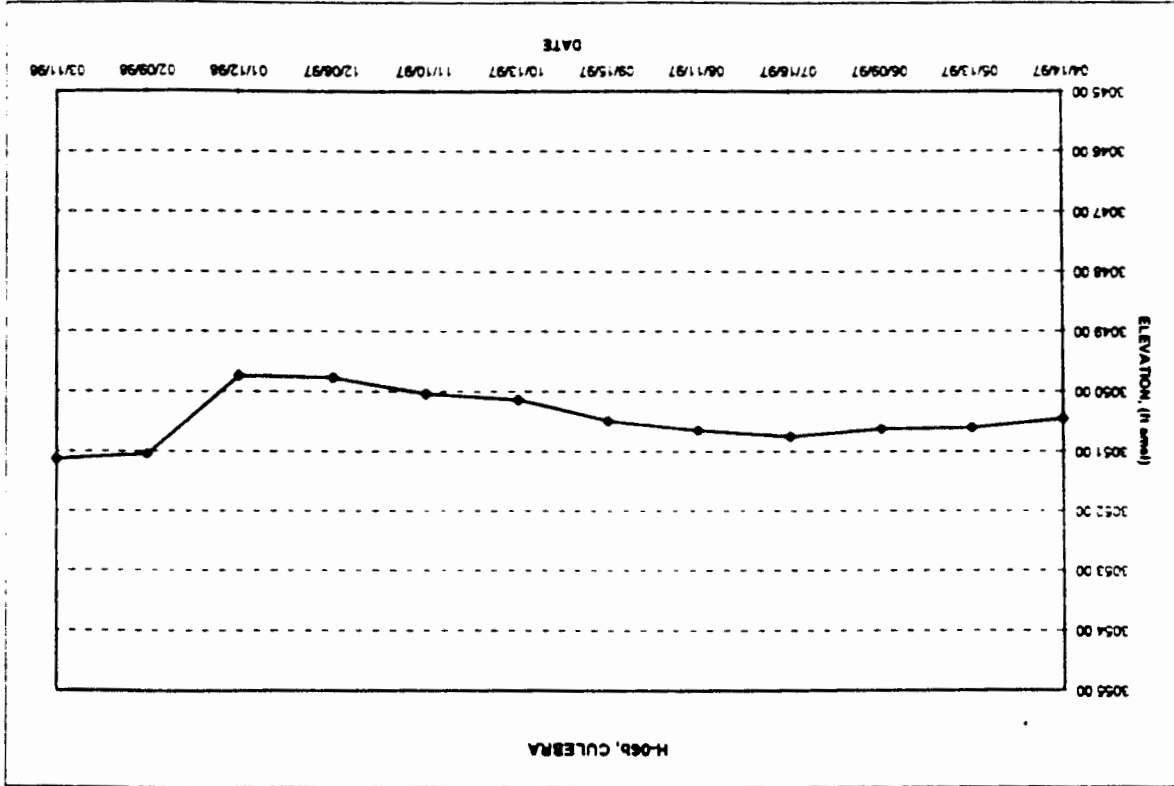




WELL NUMBER	ZONE	CASINO ELEVATION [c amsl]	DATE	TIME	DEPTH TO WATER	ADJUST TO TOC	ADJUSTED DEPTH TOC	ADJUSTED DEPTH METERS	ELEVATION LEVEL	ELEVATION METERS
DOE-2	CUL	3419.09	04/14/97	10:51	365.53	0.00	365.53	111.41	3053.56	930.72
DOE-2	CUL	3419.09	05/14/97	08:10	365.64	0.00	365.64	111.45	3053.45	930.69
DOE-2	CUL	3419.09	06/11/97	12:14	365.25	0.00	365.25	111.33	3053.84	930.81
DOE-2	CUL	3419.09	07/16/97	11:07	364.76	0.00	364.76	111.18	3054.13	930.96
DOE-2	CUL	3419.09	08/12/97	13:33	365.26	0.00	365.26	111.33	3053.83	930.81
DOE-2	CUL	3419.09	09/15/97	10:53	365.17	0.00	365.17	111.30	3053.92	930.83
DOE-2	CUL	3419.09	10/15/97	13:35	365.45	0.00	365.45	111.39	3053.64	930.75
DOE-2	CUL	3419.09	11/12/97	09:02	365.59	0.00	365.59	111.43	3053.50	930.71
DOE-2	CUL	3419.09	12/08/97	11:53	366.45	0.00	366.45	111.69	3052.64	930.44
DOE-2	CUL	3419.09	01/12/98	11:55	366.33	0.00	366.33	111.66	3052.76	930.48
DOE-2	CUL	3419.09	02/09/98	11:47	363.69	0.00	363.69	110.85	3055.40	931.29
DOE-2	CUL	3419.09	03/11/98	10:00	362.55	0.00	362.55	110.51	3056.54	931.63

WATERLEVEL ELEVATION  
UPDATE  
MARCH 1998

WELL NUMBER ZONE CASINO ELEVATION [c amsl] DATE TIME DEPTH TO WATER ADJUST TO TOC ADJUSTED DEPTH TOC ADJUSTED DEPTH METERS ELEVATION LEVEL ELEVATION METERS

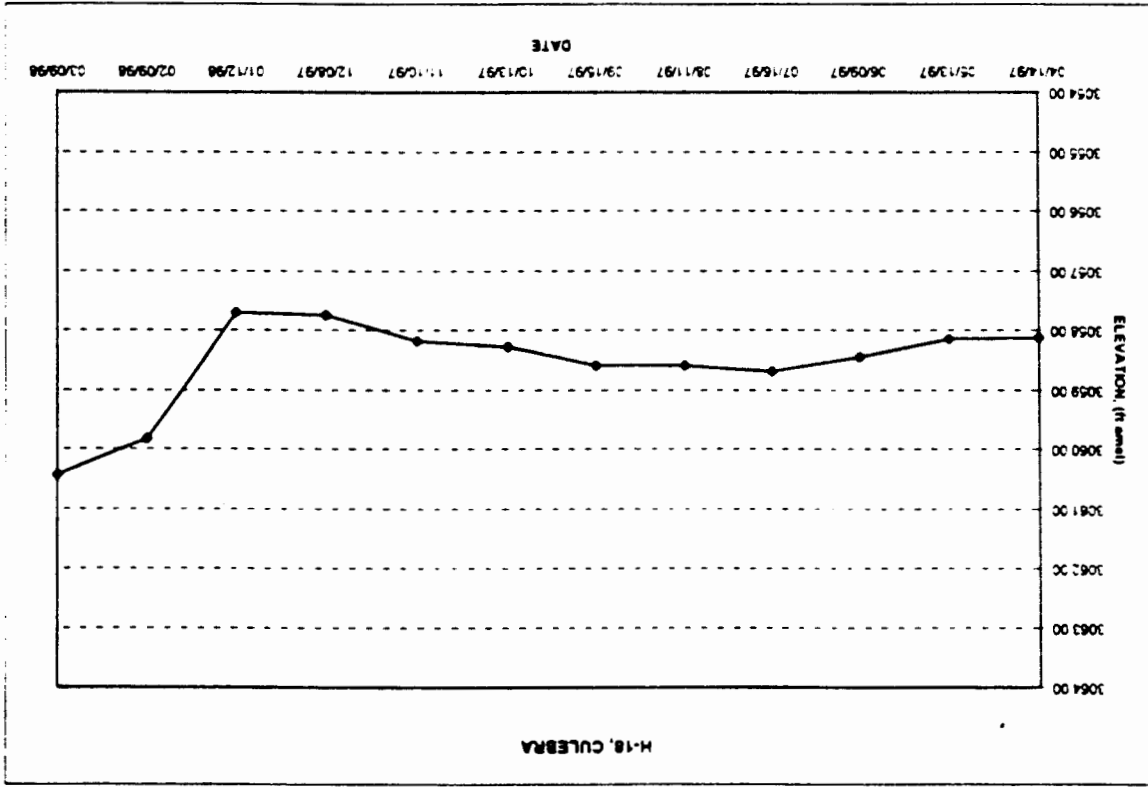


WELL NUMBER	ZONE	CASINO ELEVATION ft amsl	DATE	TIME	DEPTH TO WATER	ADJUST TO TOC	ADJUSTED DEPTH TOC	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION IN METERS
H-06B	CUL	3348.25	04/14/97	10 00	297.80	0.00	297.80	90.77	3050.45
H-06B	CUL	3348.25	05/13/97	14 04	297.66	0.00	297.66	90.73	3050.59
H-06B	CUL	3348.25	06/09/97	10 39	297.63	0.00	297.63	90.72	3050.62
H-06B	CUL	3348.25	07/16/97	10 43	297.51	0.00	297.51	90.68	3050.74
H-06B	CUL	3348.25	08/11/97	10 41	297.61	0.00	297.61	90.71	3050.64
H-06B	CUL	3348.25	09/15/97	10 07	297.77	0.00	297.77	90.76	3050.48
H-06B	CUL	3348.25	10/13/97	11 40	298.13	0.00	298.13	90.87	3050.12
H-06B	CUL	3348.25	11/10/97	10 49	298.22	0.00	298.22	90.90	3050.03
H-06B	CUL	3348.25	12/08/97	11 02	298.49	0.00	298.49	90.98	3049.76
H-06B	CUL	3348.25	01/12/98	11 06	298.52	0.00	298.52	90.99	3049.73
H-06B	CUL	3348.25	02/09/98	10 56	297.20	0.00	297.20	90.59	3051.05
H-06B	CUL	3348.25	03/11/98	09 03	297.12	0.00	297.12	90.56	3051.13

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WATERLEVEL ELEVATION  
UPDATE  
MARCH 1998

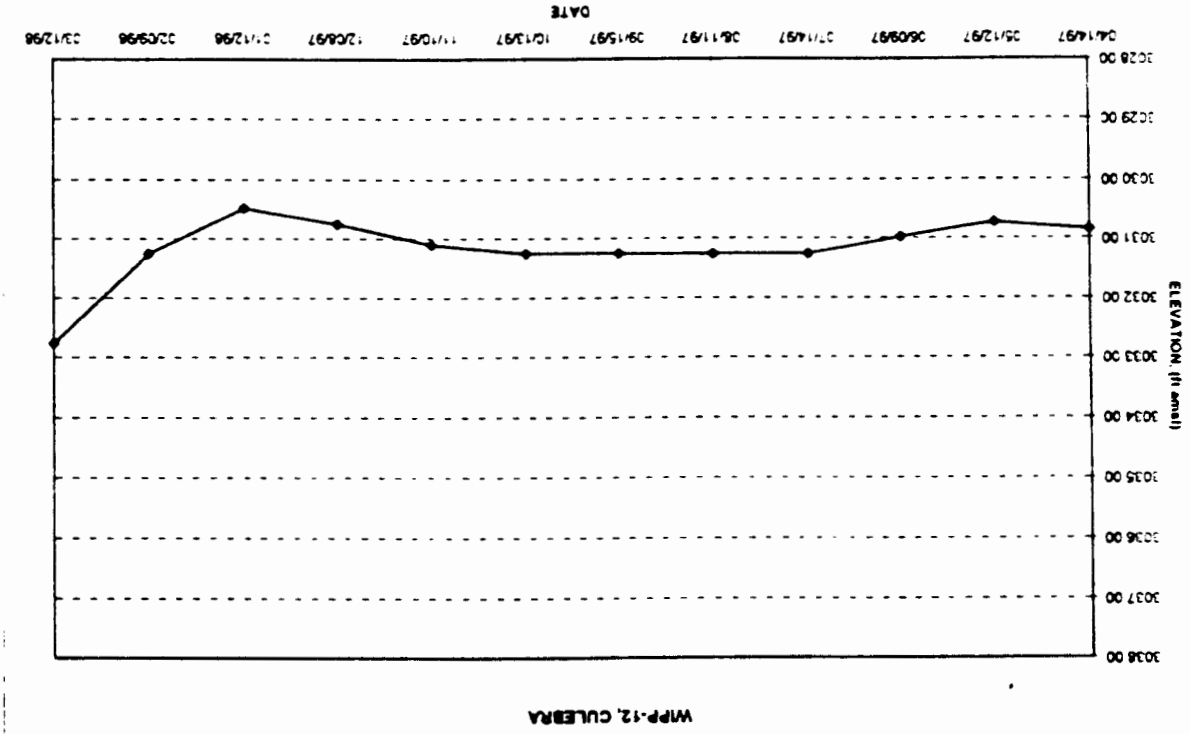
WELL NUMBER      ZONE      CASINO ELEVATION  
ft amsl      DATE      TIME      DEPTH TO WATER  
ADJUST TO TOC      ADJUSTED DEPTH TOC      ADJUSTED DEPTH METERS      WATER LEVEL ELEVATION  
IN METERS



H-18, CULEBRA

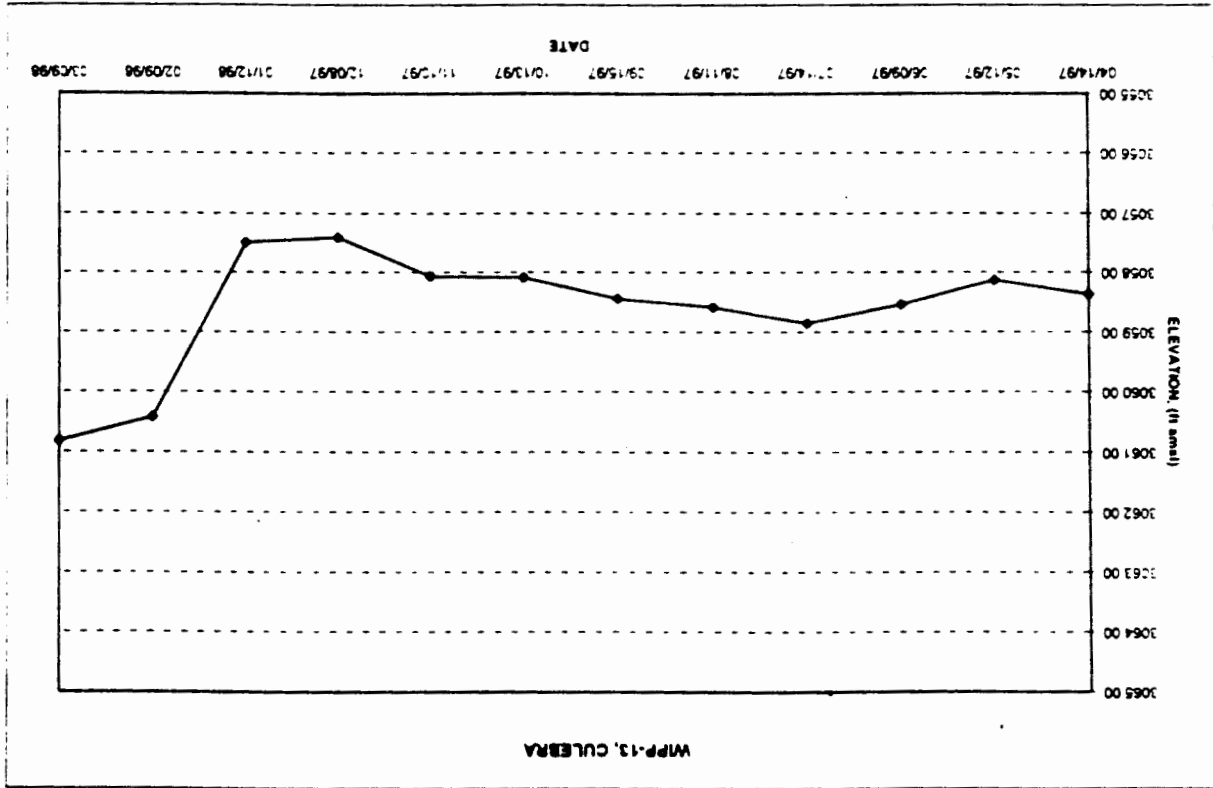
WELL NUMBER	CONE	CASING ELEVATION (ft amsl)	DATE	TIME	DEPTH TO WATER	ADJUST TO TOC	ADJUSTED DEPTH TOC	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION METERS	ELEVATION IN METERS
H-18	CUL	3414.21	04/14/97	15:20	356.09	0.00	356.09	108.54	3059.12	932.11
H-18	CUL	3414.21	05/13/97	13:47	356.07	0.00	356.07	108.51	3058.14	932.12
H-18	CUL	3414.21	06/09/97	11:09	355.77	0.00	355.77	108.44	3058.44	932.21
H-18	CUL	3414.21	07/16/97	10:55	355.53	0.00	355.53	108.27	3058.68	932.29
H-18	CUL	3414.21	08/11/97	10:56	355.63	0.00	355.63	108.40	3058.58	932.26
H-18	CUL	3414.21	09/15/97	10:26	355.62	0.00	355.62	108.39	3058.59	932.26
H-18	CUL	3414.21	10/13/97	12:00	355.94	0.00	355.94	108.49	3058.27	932.16
H-18	CUL	3414.21	11/10/97	11:33	356.03	0.00	356.03	108.52	3058.18	932.13
H-18	CUL	3414.21	12/08/97	11:15	356.47	0.00	356.47	108.65	3057.74	932.00
H-18	CUL	3414.21	01/12/98	11:23	356.51	0.00	356.51	108.66	3057.70	931.99
H-18	CUL	3414.21	02/09/98	11:07	354.39	0.00	354.39	108.02	3059.82	932.63
H-18	CUL	3414.21	03/09/98	11:37	353.78	0.00	353.78	107.83	3060.43	932.82

WATER LEVEL ELEVATION  
 :UPDATE  
 MAPCON 1998



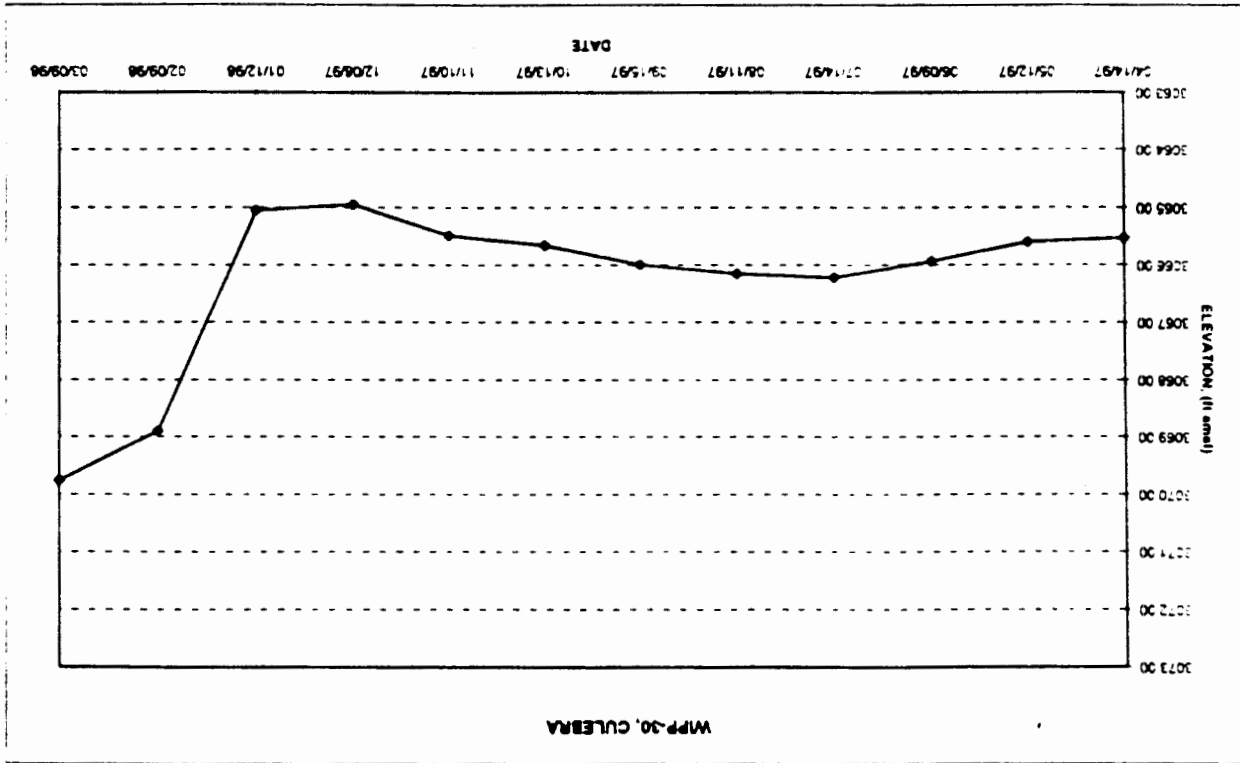
WELL NUMBER	ZONE	CASINO ELEVATION [ft amsl]	DATE	TIME	DEPTH TO WATER	ADJUST TO	ADJUSTED DEPTH	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION	ELEVATION IN METERS
WPP-12	CUL	3472.06	04/14/97	12 00	441.21	0.00	441.21	134.48	3030.85	923.80
WPP-12	CUL	3472.06	05/12/97	12 34	441.33	0.00	441.33	134.52	3030.73	923.77
WPP-12	CUL	3472.06	06/09/97	12 26	441.08	0.00	441.08	134.44	3030.98	923.84
WPP-12	CUL	3472.06	07/14/97	11 40	440.80	0.00	440.80	134.36	3031.26	923.93
WPP-12	CUL	3472.06	08/11/97	12 33	440.80	0.00	440.80	134.36	3031.26	923.93
WPP-12	CUL	3472.06	09/15/97	11 34	440.81	0.00	440.81	134.36	3031.25	923.93
WPP-12	CUL	3472.06	10/13/97	13 30	440.81	0.00	440.81	134.36	3031.25	923.93
WPP-12	CUL	3472.06	11/10/97	12 55	440.96	0.00	440.96	134.40	3031.10	923.88
WPP-12	CUL	3472.06	12/08/97	12 58	441.31	0.00	441.31	134.51	3030.75	923.77
WPP-12	CUL	3472.06	01/12/98	13 06	441.57	0.00	441.57	134.59	3030.49	923.69
WPP-12	CUL	3472.06	02/09/98	13 18	440.81	0.00	440.81	134.36	3031.25	923.93
WPP-12	CUL	3472.06	03/12/98	10 45	439.30	0.00	439.30	133.90	3032.76	924.39

WATERLEVEL ELEVATION  
UPDATE  
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WELL NUMBER	ZONE	CASING ELEVATION (ft amsl)	DATE	TIME	DEPTH TO WATER	ADJUST TO	ADJUSTED DEPTH TOC	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION METERS	ELEVATION IN METERS
WPP-13	CUL	3405.71	04/14/97	10:42	347.35	0.00	347.35	105.87	3058.36	932.19
WPP-13	CUL	3405.71	05-12-97	13:06	347.58	0.00	347.58	105.94	3058.13	932.12
WPP-13	CUL	3405.71	06/09/97	11:33	347.18	0.00	347.18	105.82	3058.53	932.24
WPP-13	CUL	3405.71	07-14-97	11:55	346.87	0.00	346.87	105.73	3058.84	932.33
WPP-13	CUL	3405.71	08/11/97	11:28	347.13	0.00	347.13	105.81	3058.58	932.26
WPP-13	CUL	3405.71	09/15/97	10:46	347.27	0.00	347.27	105.85	3058.44	932.21
WPP-13	CUL	3405.71	10/13/97	12:25	347.63	0.00	347.63	105.96	3058.08	932.10
WPP-13	CUL	3405.71	11/10/97	12:03	347.65	0.00	347.65	105.96	3058.06	932.10
WPP-13	CUL	3405.71	12/08/97	11:33	348.31	0.00	348.31	106.16	3057.40	931.90
WPP-13	CUL	3405.71	01/12/98	11:45	348.23	0.00	348.23	106.14	3057.48	931.92
WPP-13	CUL	3405.71	02/09/98	11:35	345.29	0.00	345.29	105.24	3060.42	932.82
WPP-13	CUL	3405.71	03/09/98	13:26	344.89	0.00	344.89	105.12	3060.82	932.94

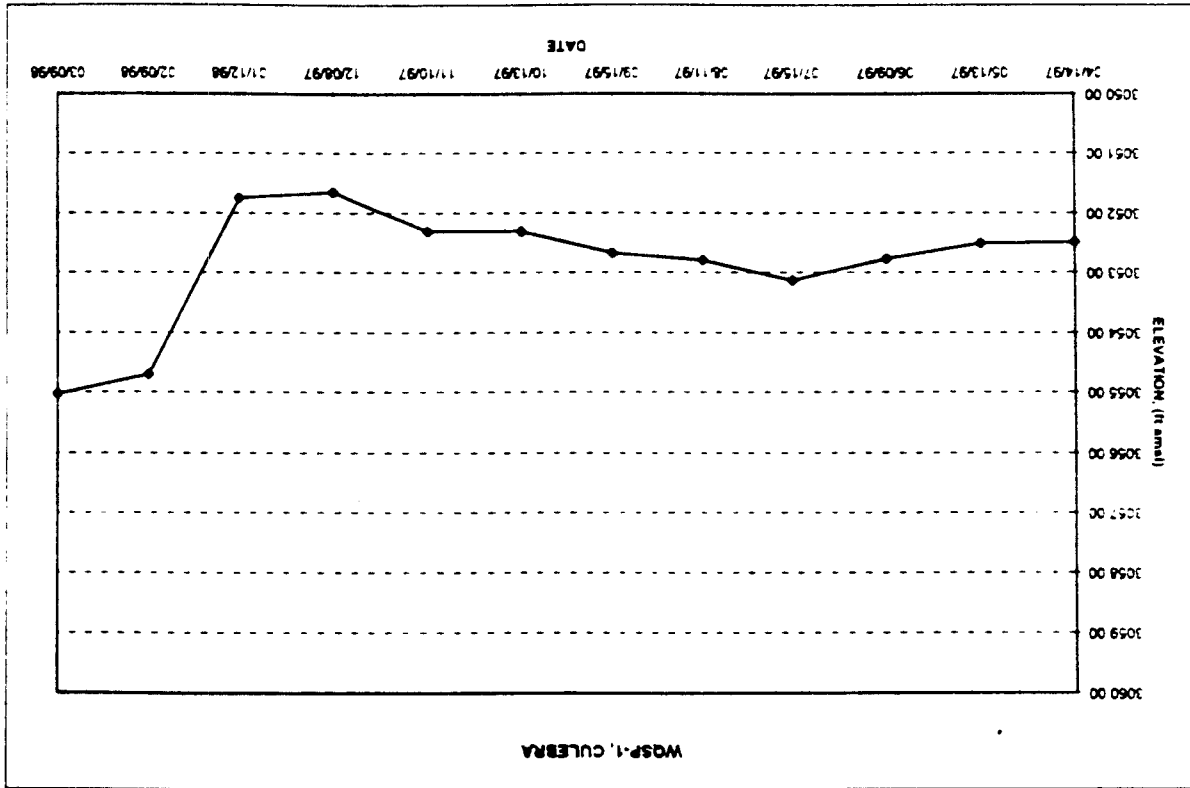
WATERLEVEL ELEVATION  
UPDATE  
MARCH 1998



WELL NUMBER	ZONE	CASINO ELEVATION (ft amsl)	DATE	TIME	DEPTH TO WATER	ADJUST TO	ADJUSTED TOC	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION METERS	ELEVATION IN METERS
WFP-30 (PIP)	CUL	3429.05	04/14/97	08:07	164.72	1.20	363.52	110.80	3065.53	3065.53
WFP-30 (PIP)	CUL	3429.05	05/12/97	13:30	164.66	1.20	363.46	110.78	3065.59	3065.59
WFP-30 (PIP)	CUL	3429.05	06/09/97	08:26	164.32	1.20	363.12	110.68	3065.93	3065.93
WFP-30 (PIP)	CUL	3429.05	07/14/97	08:16	164.04	1.20	362.84	110.59	3066.21	3066.21
WFP-30 (PIP)	CUL	3429.05	08/11/97	08:36	164.11	1.20	362.91	110.61	3066.14	3066.14
WFP-30 (PIP)	CUL	3429.05	09/15/97	08:12	164.26	1.20	363.06	110.66	3065.99	3065.99
WFP-30 (PIP)	CUL	3429.05	10/13/97	09:55	164.60	1.20	363.40	110.76	3065.65	3065.65
WFP-30 (PIP)	CUL	3429.05	11/10/97	09:06	164.77	1.20	363.57	110.82	3065.48	3065.48
WFP-30 (PIP)	CUL	3429.05	12/08/97	08:40	165.30	1.20	364.10	110.98	3064.95	3064.95
WFP-30 (PIP)	CUL	3429.05	01/12/98	09:30	165.20	1.20	364.00	110.95	3065.05	3065.05
WFP-30 (PIP)	CUL	3429.05	02/09/98	08:44	161.36	1.20	360.16	109.78	3068.89	3068.89
WFP-30 (PIP)	CUL	3429.05	03/09/98	09:18	160.49	1.20	359.29	109.51	3069.76	3069.76

WATERLEVEL ELEVATION UPDATE MARCH 1998

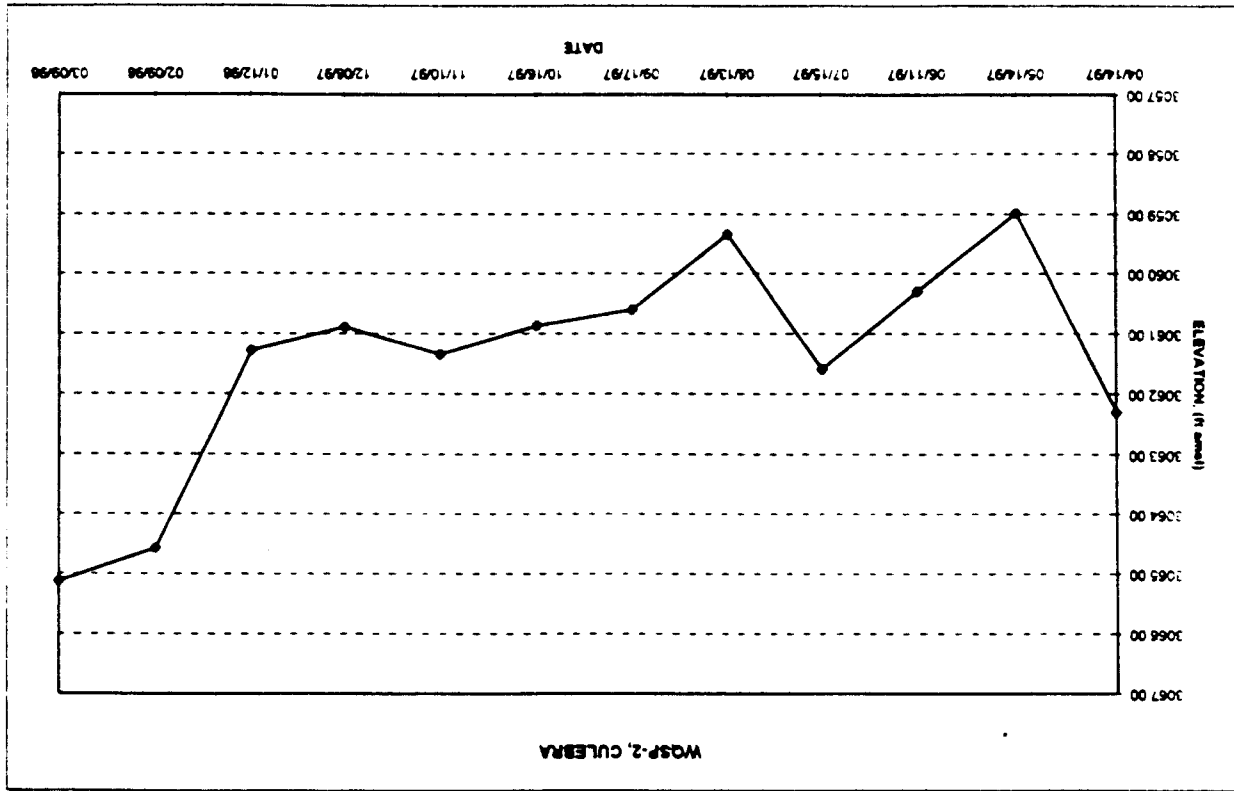
WELL NUMBER ZONE CASINO ELEVATION (ft amsl) DATE TIME DEPTH TO WATER ADJUST TO ADJUSTED TOC ADJUSTED DEPTH METERS WATER LEVEL ELEVATION METERS ELEVATION IN METERS



WELL NUMBER	ZONE	CASINO ELEVATION (ft amsl)	DATE	TIME	DEPTH TO WATER	ADJUST TO	ADJUSTED DEPTH TOC	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION METERS	ELEVATION IN METERS
WQSP-1	CUL	3419.20	04/14/97	10 30	366.92	0.21	366.71	111.77	3052.49	930.40
WQSP-1	CUL	3419.20	05/13/97	13 40	366.90	0.21	366.69	111.77	3052.51	930.41
WQSP-1	CUL	3419.20	06/09/97	11 18	366.65	0.21	366.44	111.69	3052.76	930.48
WQSP-1	CUL	3419.20	07/15/97	14 45	366.28	0.21	366.07	111.58	3053.13	930.59
WQSP-1	CUL	3419.20	08/11/97	11 09	366.62	0.21	366.41	111.68	3052.79	930.49
WQSP-1	CUL	3419.20	09/15/97	10 41	366.74	0.21	366.53	111.72	3052.67	930.45
WQSP-1	CUL	3419.20	10/13/97	12 10	367.11	0.21	366.90	111.83	3052.30	930.34
WQSP-1	CUL	3419.20	11/10/97	11 42	367.11	0.21	366.90	111.83	3052.30	930.34
WQSP-1	CUL	3419.20	12/08/97	11 22	367.76	0.21	367.55	112.03	3051.65	930.14
WQSP-1	CUL	3419.20	01/12/98	11 31	367.66	0.21	367.45	112.00	3051.75	930.17
WQSP-1	CUL	3419.20	02/09/98	11 23	364.72	0.21	364.51	111.10	3054.69	931.07
WQSP-1	CUL	3419.20	03/09/98	12 16	364.38	0.21	364.17	111.00	3055.03	931.17

WATERLEVEL ELEVATION  
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WQSP-2	CUL	3463.90	04/14/97	11.06	401.81	0.21	401.60	122.41	3062.10	933.39
WQSP-2	CUL	3463.90	05/14/97	07.56	405.13	0.21	404.92	123.42	3060.88	932.28
WQSP-2	CUL	3463.90	06/11/97	12.30	403.82	0.21	403.61	123.02	3060.29	932.78
WQSP-2	CUL	3463.90	07/15/97	14.30	402.52	0.21	402.31	122.62	3061.59	933.17
WQSP-2	CUL	3463.90	08/13/97	12.19	404.77	0.21	404.56	123.31	3059.34	932.49
WQSP-2	CUL	3463.90	09/17/97	08.08	403.52	0.21	403.31	122.93	3060.59	932.87
WQSP-2	CUL	3463.90	10/16/97	09.25	403.25	0.21	403.04	122.85	3060.86	932.95
WQSP-2	CUL	3463.90	11/10/97	13.45	402.77	0.21	402.56	122.70	3061.34	933.10
WQSP-2	CUL	3463.90	12/08/97	12.03	403.23	0.21	403.02	122.84	3060.88	932.96
WQSP-2	CUL	3463.90	01/12/98	14.04	402.83	0.21	402.62	122.72	3061.28	933.08
WQSP-2	CUL	3463.90	02/09/98	12.04	399.54	0.21	399.33	121.72	3064.57	934.08
WQSP-2	CUL	3463.90	03/09/98	13.45	399.00	0.21	398.79	121.55	3065.11	934.25

WATERLEVEL ELEVATION UPDATE MARCH 1998

WELL NUMBER	ZONE	CASINO ELEVATION (ft amsl)	DATE	TIME	DEPTH TO WATER	ADJUST TO TOC	ADJUSTED DEPTH TOC	ADJUSTED DEPTH METERS	WATER LEVEL ELEVATION	ELEVATION IN METERS
WQSP-2	CUL	3463.90	04/14/97	11.06	401.81	0.21	401.60	122.41	3062.10	933.39
WQSP-2	CUL	3463.90	05/14/97	07.56	405.13	0.21	404.92	123.42	3060.88	932.28
WQSP-2	CUL	3463.90	06/11/97	12.30	403.82	0.21	403.61	123.02	3060.29	932.78
WQSP-2	CUL	3463.90	07/15/97	14.30	402.52	0.21	402.31	122.62	3061.59	933.17
WQSP-2	CUL	3463.90	08/13/97	12.19	404.77	0.21	404.56	123.31	3059.34	932.49
WQSP-2	CUL	3463.90	09/17/97	08.08	403.52	0.21	403.31	122.93	3060.59	932.87
WQSP-2	CUL	3463.90	10/16/97	09.25	403.25	0.21	403.04	122.85	3060.86	932.95
WQSP-2	CUL	3463.90	11/10/97	13.45	402.77	0.21	402.56	122.70	3061.34	933.10
WQSP-2	CUL	3463.90	12/08/97	12.03	403.23	0.21	403.02	122.84	3060.88	932.96
WQSP-2	CUL	3463.90	01/12/98	14.04	402.83	0.21	402.62	122.72	3061.28	933.08
WQSP-2	CUL	3463.90	02/09/98	12.04	399.54	0.21	399.33	121.72	3064.57	934.08
WQSP-2	CUL	3463.90	03/09/98	13.45	399.00	0.21	398.79	121.55	3065.11	934.25

Bob Neill Hendart. Bob + George contention on numerous issues.  
Several comments on ORR, not like "asking for a cure for cancer before shipment of waste." Lokesh to talk later about water inflow in exhaust shaft.

Recent DOE report on buried TRU wastes, Pre-'70s was low-intermediate level which was "disposed" compare to post '70 which is retrievably stored @ 23 sites.

Chris Wente Concern about perception w/ shift from St Francis to unpaired bypass  
Discussion about civil disobedience

George Dials Remaining steps - EPA cert, Secretary's decision, WIPP opens for non-mixed waste, then RCRA Permit.  
FY 98 shipments INEEL - 1, LANL - 17, RFETS - 15  
99 — — — 9 — — 23 — — 151  
LANL has 5 repackaged shipments ready. No uncertainty about containing RCRA wastes.

INEEL Approved yesterday (4/29) for waste char. George isn't happy about repackaging, but this has dropped due to rigorous process to identify + eliminate haz constituents.

Schedule - EPA cert/Sec decision - May 15, disposal operations June 15

New Org chart.

Paradigm shift to regulatory status.

Cooper Weyman - who represents state for CAC agreement?

(Governor or his representative) - Chair of Task Force.  
not EEG or NMAG

(2)

1989 Contract between EEG + DOE - original contract + 4 - 1 yr extn. 1993 extended thru 1999 (Bob says it began in 1978, will provide it to Cooper).

EEG authorized by LWIA do several things (Section 17). Disagree to meaning of "preliminary report." Lokesh said LWIA does not limit EEG's authority, but to ensure DOE complies.

Also C+C, PL 100-456 address ("legal authorized" versus "limited") to review, evaluate, & comment on environ, health & safety aspects of WIPP

Both State + EEG can conduct evaluations & review, but under C+C only need to resolve State's comments.

No requirement to resolve EEG concerns, other than to consult & cooperate

Bob said C+C states EEG represents State on commenting on SAR.

EEG had 13 comments on ORR, Cooper believes they have ~~no~~ authority to comment, but ~~no~~ authority to recommend & have concerns resolved.

Bob suggested Cooper also look at State law, contract,

Whyne ORR  
Walker

Lokesh CCA review (EEG 68) discussion of Dewey Lake  
DOE/EA 97-2219 Exhaust Sheet Hydrology Report '97  
97-2278 ES: Phase 2

All piezometers but PZ-3 found water saturation in Dewey Lake  
Avg sustainable pumping rate ~ 0.6 gpm

Butch  
Stroud

Site Certification

- 6 audits since 7/1/97
- LANC Cert 9/12
- RFETS " 3/26
- INEEL " 4/29

TRJtech + MCS - mobile vendors  
 NTS w/ vendors 7/20 - 7/24  
 Mobile vendors approved, not certified  
 Provide target dates for other sites.

→ Kent talked about certification, Lindsey asked some questions, George shut him up.

Kent

Office of Waste Disposal Operations  
 Waste characterized / certified to meet DOE, EPA, NMED require  
 plus NRC, LWA

Non-intention to notify NMED or demonstrate lack of haz constituents. Ed Kelley apparently said NMED can observe @ LANC for packaging.

→ George said it was a policy mistake to "volunteer" to comply w/ RCRA

Mike Brown

Halfpack certification

Discussion

Lokesh's concern about age of Panel 1, closure of room 7 only half full

George distinguished between public health + safety vs worker health + safety. Ground control system inspected by mine inspectors. Extended discussion. Lokesh believes breathe cloth insufficient for partially filled rooms. George said they would only abandon a room based on safety