GW - 107

GENERAL CORRESPONDENCE

YEAR(S):

1996-1995

Revised August 1967

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT

To Appropriate the Underground Waters of the State of New Mexico

Date Received _____ File No. _____

1. Name of applicant El Paso Natural Gas Corp.
   Mailing address P. O. Box 1492
   City and State El Paso, Texas, 79978
2. Source of water supply Shallow Water Aquifer (artesian or shallow water aquifer), located in Lea County Basin (name of underground basin)
3. The well is to be located in the ____ ¼ SE ¼ SW ¼, Section 32 Township 23S Range 37E N.M.P.M., or Tract No. ____ of Map No. ____ of the _____ District, on land owned by Christie Gas Corporation, 901 S. Mopac, Ste 515 Austin, Tx 78746
4. Description of well: name of driller Scarborough Drilling, LaMesa, Tx; Outside Diameter of casing 10" inches; Approximate depth to be drilled 180' feet;
5. Quantity of water to be appropriated and beneficially used 35 (consumptive use, diversion) acre feet, for Groundwater recovery for contaminant plume recovery purposes.
6. Acreage to be irrigated or place of use 35 acres.

Subdivision	Section	Township	Range	Acres	Owner

7. Additional statements or explanations The proposed recovery well will be used for the purpose of groundwater recovery and plume containment. The recovery well pump rate is anticipated to be approximately 15 gpm. The recovered water will be conveyed via buried 4-inch polyethylene line to the Oxy Petroleum, Langlie-Mattix waterflood injection station where it will be used as additional make-up water for their secondary oil recovery operations.

I, Richard A. Sumner, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

ROSA M. THIBODEAU NOTARY PUBLIC STATE OF TEXAS EXPIRES 01-31-98

EPNG, Permittee,

By: Richard A. Sumner.

Subscribed and sworn to before me this 5th day of December, A.D., 19 96.

My commission expires 1-31-98

Rosa M. Thibodeau
Notary Public

Number of this permit _____

ACTION OF STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the detriment of any others having existing rights; further provided that all rules and regulations of the State Engineer pertaining to the drilling of _____ wells be complied with; and further subject to the following conditions: _____

Proof of completion of well shall be filed on or before _____, 19_____

Proof of application of water to beneficial use shall be filed on or before _____, 19 _____

Witness my hand and seal this _____ day of _____, A.D., 19_____.

S. E. Reynolds, State Engineer

By: _____.

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of $5.00. Each of triplicate copies must be properly signed and attested.

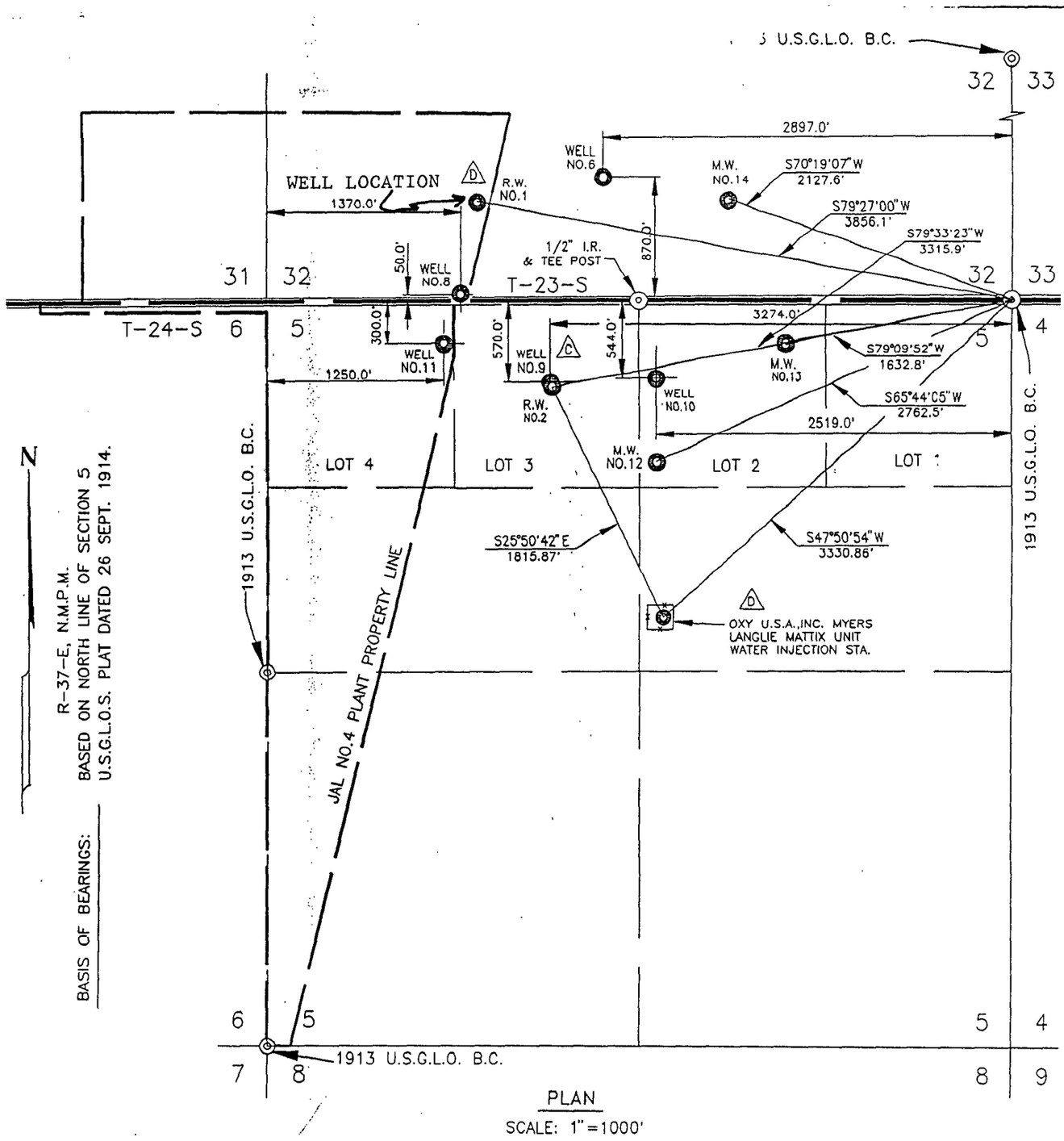
A separate application for permit must be filed for each well used.

Secs. 1–4—Fill out all blanks fully and accurately.

Sec. 5—Irrigation use shall be stated in acre feet of water per acre per annum to be applied on the land. If for municipal or other purposes, state total quantity in acre feet to be used annually.

Sec. 6—Describe only the lands to be irrigated or where water will be used. If on unsurveyed lands describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily located natural object.

Sec. 7—If lands are irrigated from any other source, explain in this section. Give any other data necessary to fully describe water right sought.



PLAN

SCALE: 1"=1000'

OWNERSHIP

SUBDIVISION	OWNER	LESSEE	RODS
ALL SECTION 5 (LESS AND EXCEPT JAL 4 PLANT TRACT)	JIMMIE J. DOOM, ET UX REBECCA J.	JIMMIE J. DOOM, ET UX REBECCA J.	
ALL SECTION 32 (LESS AND EXCEPT JAL 4 PLANT TRACT)	STATE OF NEW MEXICO	JIMMIE J. DOOM, ET UX REBECCA J.	

EF. DWG.:5004.1-X-13, R/W NO. 520121

REVISIONS

ADD. OXY STA. & RECVRY WELL 1: VERIF 2,12,13,14	8/19/96
ADD. PROPOSED RECOVERY WELL RW-2	5/30/96
WELLS 12,13 & 14 ADDED 12/4/95 R/W 950674	
ADDITIONAL WELLS ADDED	

DATE	TO	W.O.
5/31/96	G. GARIBAY (EAD)	
	RW	
11/13/92	DISTRIBUTION	
	ENGINEERING	
	R/W	

PRINT RECORD

ENG. REC.		DATE
DRAWN	EG	11/10/92
CHECKED	MLG	11/10/92
CHECKED	JTC	12/5/95
PROJ. APP.		
SURVEYED		10/17/92
CAD NO.		WTR002
R/W NO. 950674		920619
W.O.		S-10447

El Paso NATURAL GAS COMPANY

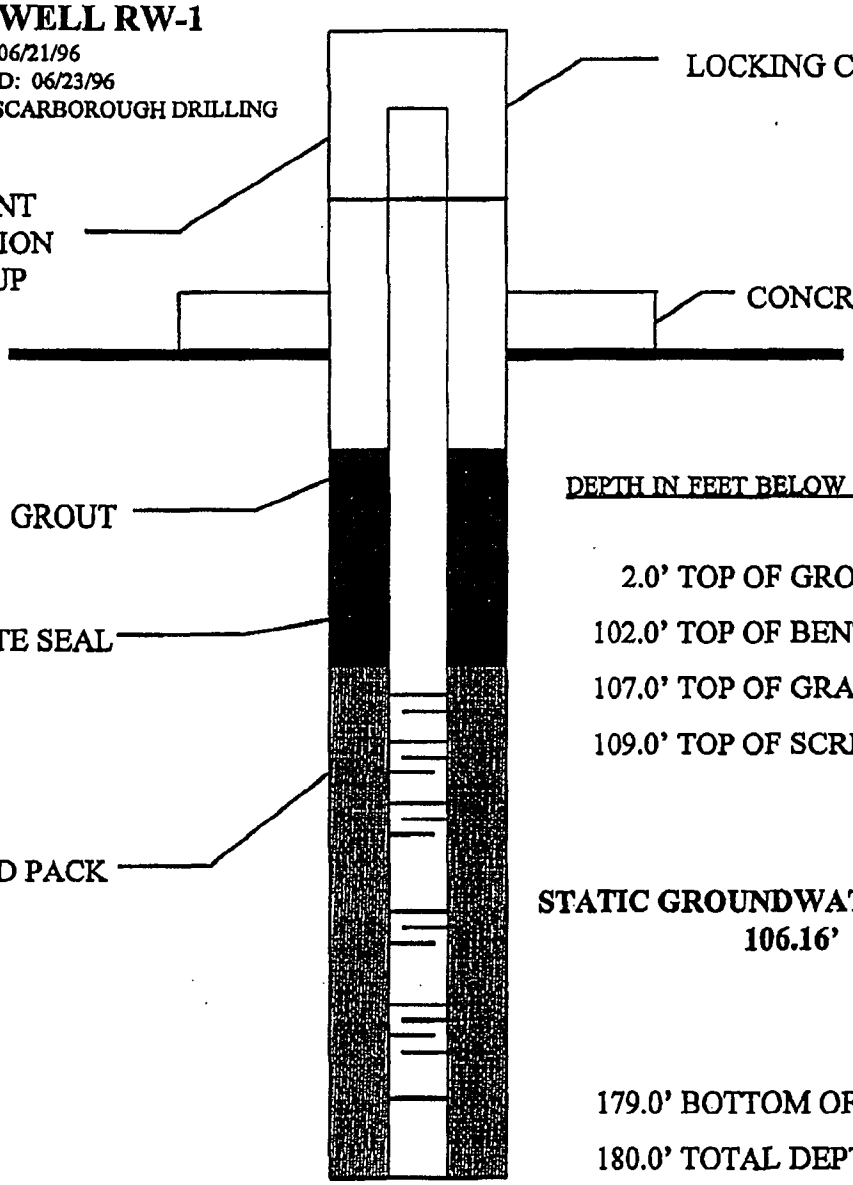
JAL NO.4 PLANT MONITORING WELLS

SECTION 5, T-24-S, R-37-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SCALE NOTED | DWG. NO. 5004.7-X-21 | REV. D

MONITOR WELL RW-1

DATE STARTED: 06/21/96
DATE COMPLETED: 06/23/96
INSTALLED BY: SCARBOROUGH DRILLING



DEPTH IN FEET BELOW LAND SURFACE

2.0' TOP OF GROUT
102.0' TOP OF BENTONITE SEAL
107.0' TOP OF GRAVEL PACK
109.0' TOP OF SCREEN

STATIC GROUNDWATER DEPTH: 106.16'

179.0' BOTTOM OF SCREEN
180.0' TOTAL DEPTH

CASING TYPE: 10" SCH. 160 PVC
SCREEN TYPE: SCH. 160 PVC 0.35 SLOT
GRAVEL PACK: 08/16 VOLUME SILICA SAND

PHILIP ENVIRONMENTAL SERVICES CORPORATION

Monitor Well Installation Diagram

EL PASO NATURAL GAS JAL #4 PLANT
LEA COUNTY, NEW MEXICO
PROJECT NUMBER 14683

Revised August 1967

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

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   (artesian or shallow water aquifer) (name of underground basin)
3. The well is to be located in the ____ ¼ NE ¼ NW ¼, Section 5 Township 24S
   Range 37E N.M.P.M., or Tract No. ____ of Map No. ____ of the _____ District,
   on land owned by Jimmie J. Doom, Et Ux Rebecca J. (leasee), State of New Mexico (owner)
4. Description of well: name of driller Scarborough Drilling, LaMesa, Texas;
   Outside Diameter of casing 10" inches; Approximate depth to be drilled 180' feet;
5. Quantity of water to be appropriated and beneficially used 35 acre feet,
   (consumptive use, diversion)
   for Groundwater recovery for contaminant plume containment purposes.
6. Acreage to be irrigated or place of use not applicable acres.

Subdivision	Section	Township	Range	Acres	Owner

7. Additional statements or explanations The proposed well will be used for the purpose of groundwater recovery and plume containment. The recovery well pump rate is anticipated to be approximately 15 gpm. The recovered water will be conveyed via buried 4-inch polyethylene line to the Oxy Petroleum, Langlie-Mattix waterflood injection station where it will be used as additional make-up water for their secondary oil recovery operations.

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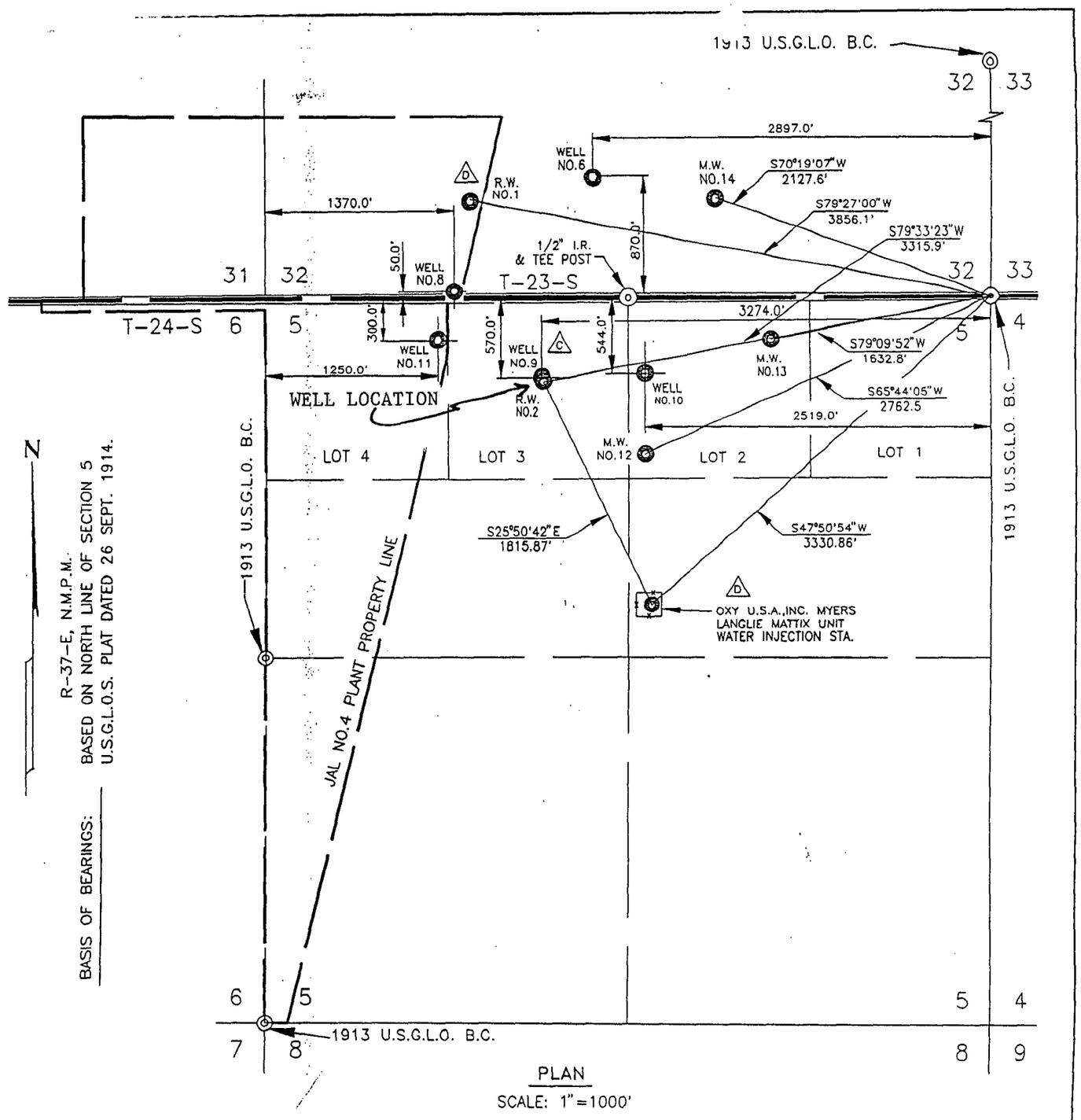
Notary Public



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SCALE: 1"=1000'

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PROJ. APP.		
SURVEYED		10/17/92
CAD NO.		WTR002
R/W NO. 950674		920619
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El Paso NATURAL GAS COMPANY

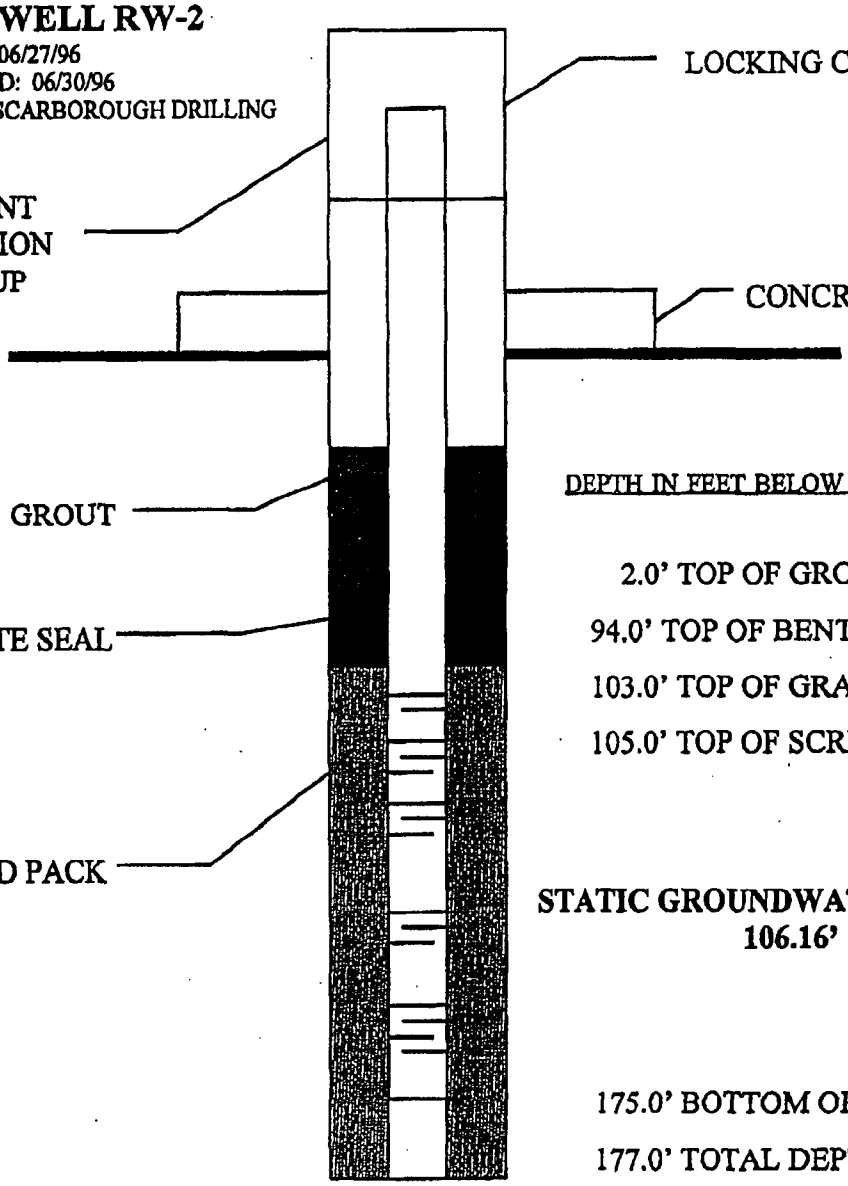
JAL NO.4 PLANT MONITORING WELLS

SECTION 5, T-24-S, R-37-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SCALE: NOTED | DWG. NO. 5004.7-X-21 | REV. D

MONITOR WELL RW-2

DATE STARTED: 06/27/96
DATE COMPLETED: 06/30/96
INSTALLED BY: SCARBOROUGH DRILLING



DEPTH IN FEET BELOW LAND SURFACE

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105.0' TOP OF SCREEN

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177.0' TOTAL DEPTH

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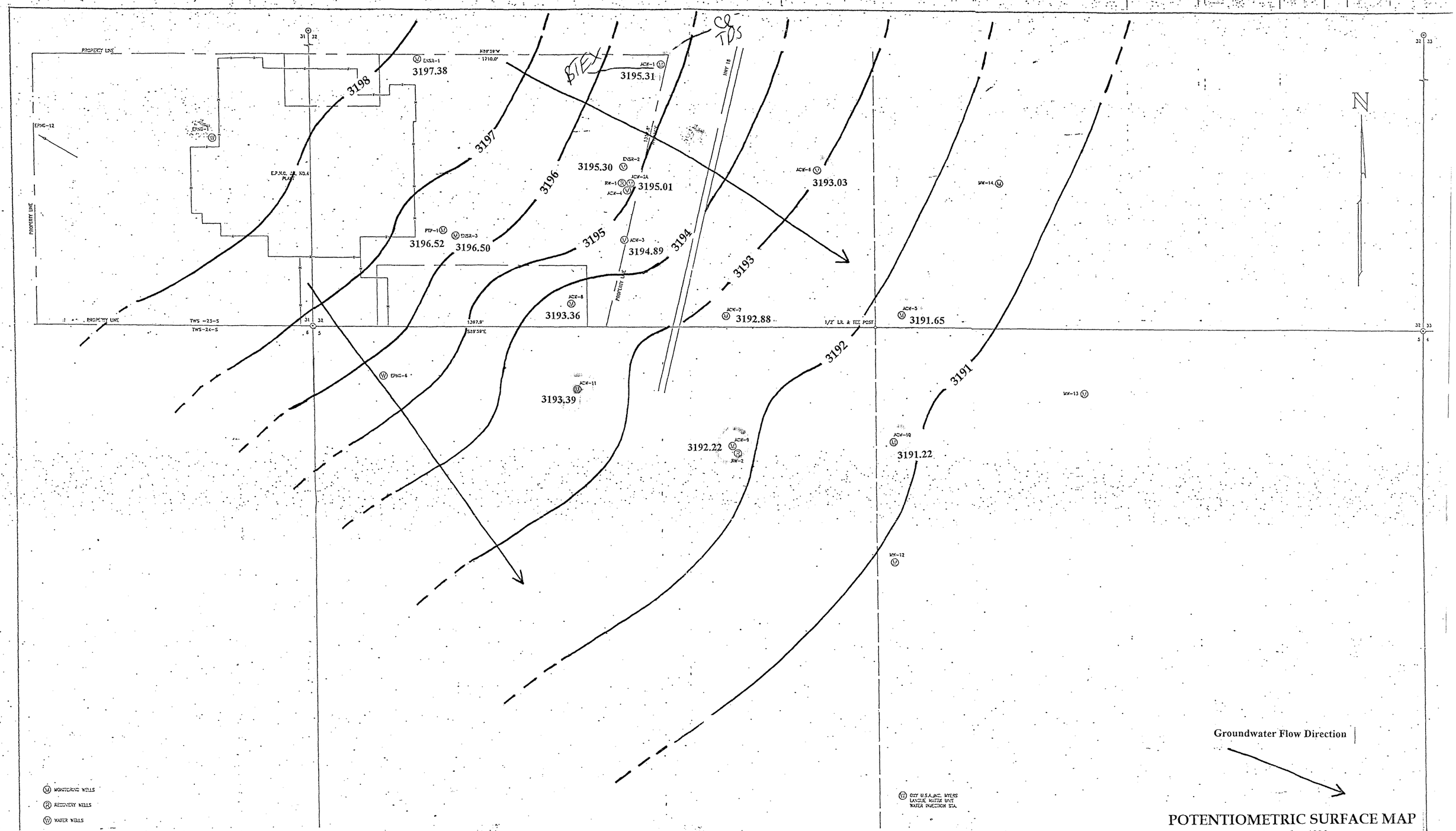
PHILIP ENVIRONMENTAL SERVICES CORPORATION

Monitor Well Installation Diagram

EL PASO NATURAL GAS JAL #4 PLANT
LEA COUNTY, NEW MEXICO
PROJECT NUMBER 14683



POTENTIOMETRIC SURFACE MAP

November 1996

Contour Interval: 1 foot

DWG. NO.	TITLE
5024.7-X-21	PLANT MONITORING WELLS

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION
2	9/30/95	JRM	REVISED WELL SYMBOLS
1	9/24/95	JRM	ADDED WELLS 5,8,9,10,11

REVISIONS

W.O.	APP.	PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN		
CAD DRAFTING	JRM	8/30/95
CHECKED	MJ	8/30/95
PROJECT APPROVAL		
SURVEY DATE		
R/W NUMBER		
COMPUTER FILE NAME	J41P62	

El Paso NATURAL GAS COMPANY

JAL NO. 4 PLANT
GROUNDWATER MONITORING
WELL LOCATIONS

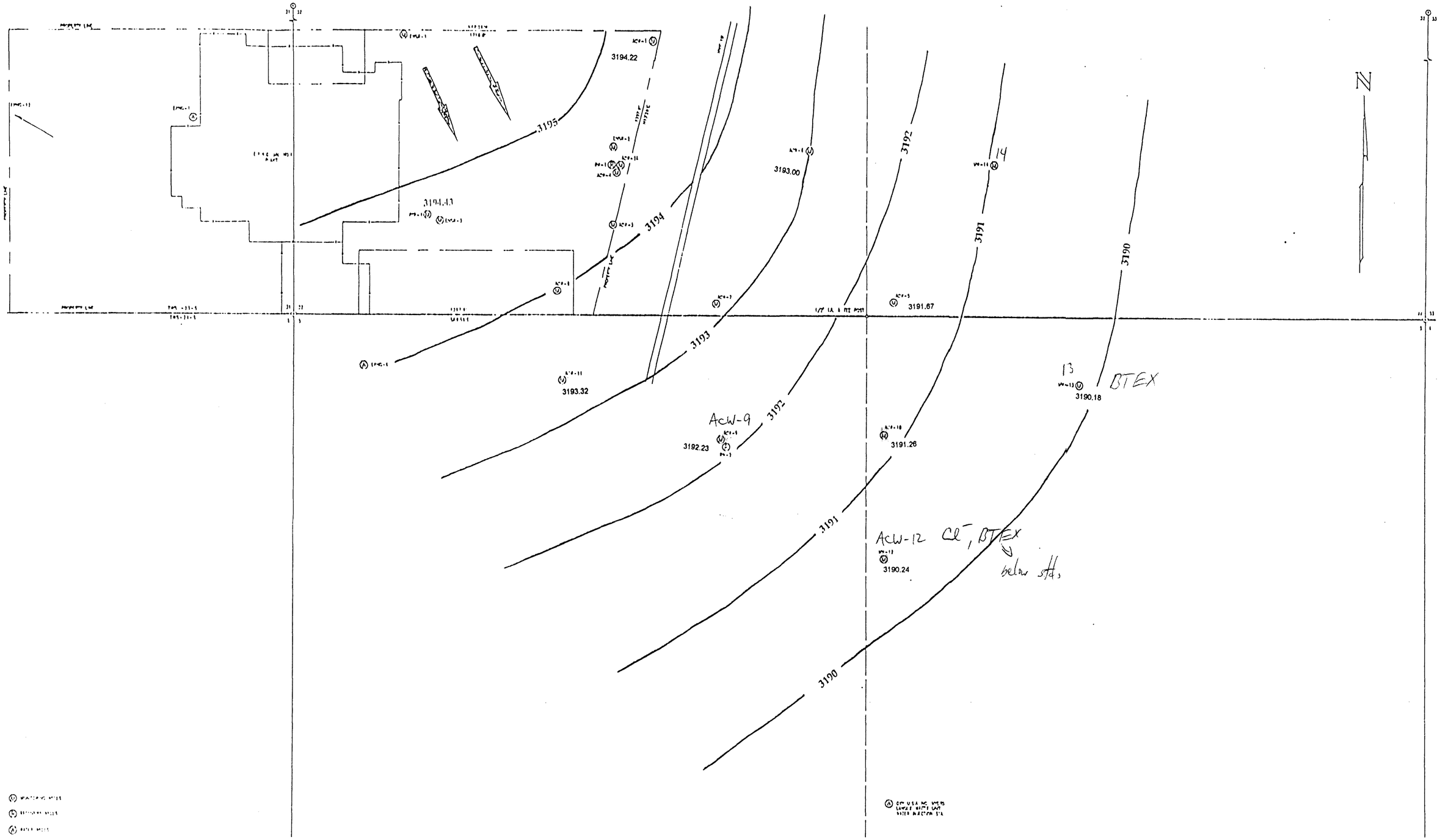
SCALE: 1" = 200'

W.O.:

DWG. NO. J4-1-P62

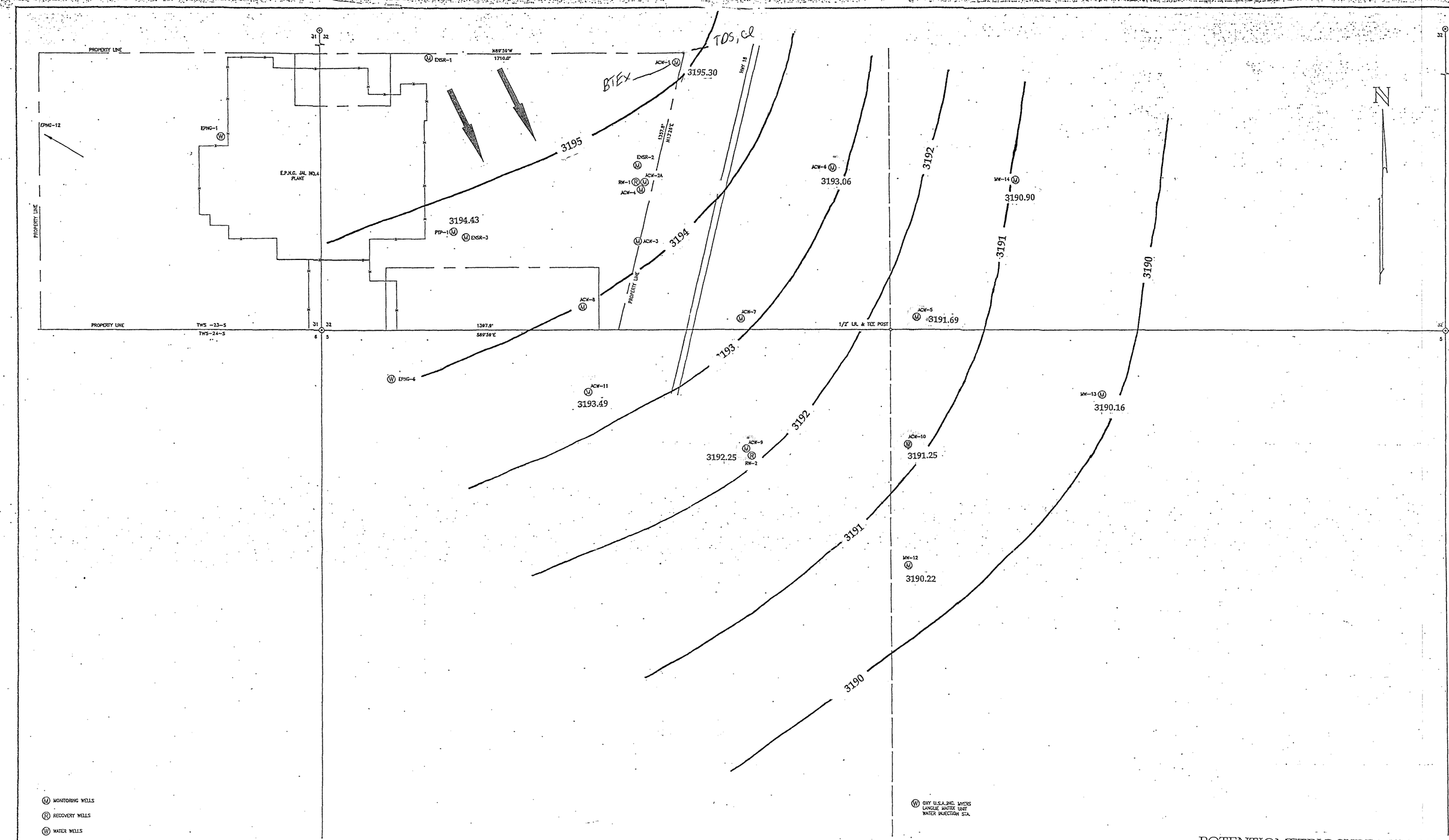
LEGEND

WAS ENV067 IN E:\ENVIRON\GENERAL



POTENTIOMETRIC SURFACE MAP
February 1997

| | | |



POTENTIOMETRIC SURFACE MAP

August 1996

DWG. NO.	TITLE
SG04.7-X-21	PLANT MONITORING WELLS

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION
2	9/30/96	JRM	REVISED WELL SYMBOLS
1	9/24/96	JRM	ADDED WELLS 5,8,9,10,11

REVISIONS

W.O.	APP.	PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN		
CAD DRAFTING	JRM	8/30/96
CHECKED	WJ	8/30/96
PROJECT APPROVAL		
SURVEY DATE		
R/W NUMBER		
COMPUTER FILE NAME	J41P62	

El Paso NATURAL GAS COMPANY

JAL NO.4 PLANT
GROUNDWATER MONITORING
WELL LOCATIONS

SCALE: 1"=200'

W.O.:

DWG. NO. J4-1-P62

LEGEND

FWS (Rev. 05/96)

WAS EN0067 IN E:\ENVIRON\GENERAL

PHILIP
ENVIRONMENTAL

Environmental Services Group
Southern Region

October 22, 1996
Project Number 14683

RECEIVED
OCT 2 3 1996
Environmental Bureau
Oil Conservation Division

Mr. William Olson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Subject: Phase II Site Assessment of the former Jal No. 4 Gas Plant in Jal, New Mexico

Dear Mr. Olsen,

Philip Environmental Services Corporation (Philip) is pleased to submit this Phase II report to the New Mexico Oil Conservation Division (NMOCD) on behalf of El Paso Natural Gas Company (EPNG) for the above referenced facility. If you have any questions about the assessment or the report, please do not hesitate to call Jeffrey Kindley of Philip Environmental at (915) 563-0118.

Sincerely,

PHILIP ENVIRONMENTAL SERVICES CORPORATION

Jeffrey Kindley

Jeffrey Kindley, P.G.
Project Manager/Geologist

Attachment:
Report

PHILIP ENVIRONMENTAL SERVICES CORPORATION
7904 Interstate 20 West • Midland, TX 79706
(915) 563-0118 • Fax (915) 563-9526

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

RECEIVED
OCT - 2 1996
OIL CONSERVATION

September 30, 1996

RECEIVED
OCT 2 1996
Environmental Bureau
Oil Conservation Division

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Third Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Richard Sumner at 915/541-5341.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

9/30/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.9	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	1.0	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.8	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	[illegible]
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	1.0	78	<0.006	0.56	100	0.069	16	4300	<0.010	6.1	3	1.9	2.8	830	620	2.1	280	
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.6	2.7	3	<7.5	759	630	2.06	293	41
5/8/96	S96-0263	Monitor Well ACW #01	4130	8190	14620	8.2	2.2	<1.25	1.0	93	0.01	0.6	118	0.09	18	3070	<0.05	6.3	2.03	<1.0	<3.0	310	718	<1.25	268	54
8/13/96	S96-0381	Monitor Well ACW #01	3500	7400	12000	8.1	4.9	<0.05	1.1	110	0.019	0.68	100	0.078	8.6	2400	0.008	3.5	1.2	<1.0	<2.0	730	690	1.9	270	41
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.9	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1.0	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/16/96	S96-0062*	Monitor Well ACW #05	506	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
5/8/96	S96-0258	Monitor Well ACW #05	519	2460	3650	7.2	0.42	5	0.8	167	0.01	0.2	24	<0.05	8	506	<0.05	<1.0	<1.0	<1.0	<3.0	190	515	4.5	653	35
8/13/96	S96-0385	Monitor Well ACW #05	500	2500	3400	7.3	0.7	5.4	2.0	200	<0.006	0.024	28	<0.007	6.3	520	0.033	<1.0	1.2	<1.0	<2.0	320	620	1	710	58
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.9	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.9	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	<0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50
5/8/96	S96-0257	Monitor Well ACW #06	2880	6460	10620	7.7	6.4	<1.25	1.3	35	0.02	4.1	21	0.14	4	2380	<0.05	4.08	1.58	<1.0	<3.0	1396	175	<1.25	48	40
8/14/96	S96-0321	Monitor Well ACW #06	2900	7100	11000	7.9	21	<0.05	1.2	85	<0.006	4.5	23	0.13	3.4	2900	0.024	4.2	2.6	<2.0	<2.0	1400	310	1.8	88	60

* Analysis done by T.O.E. Lab

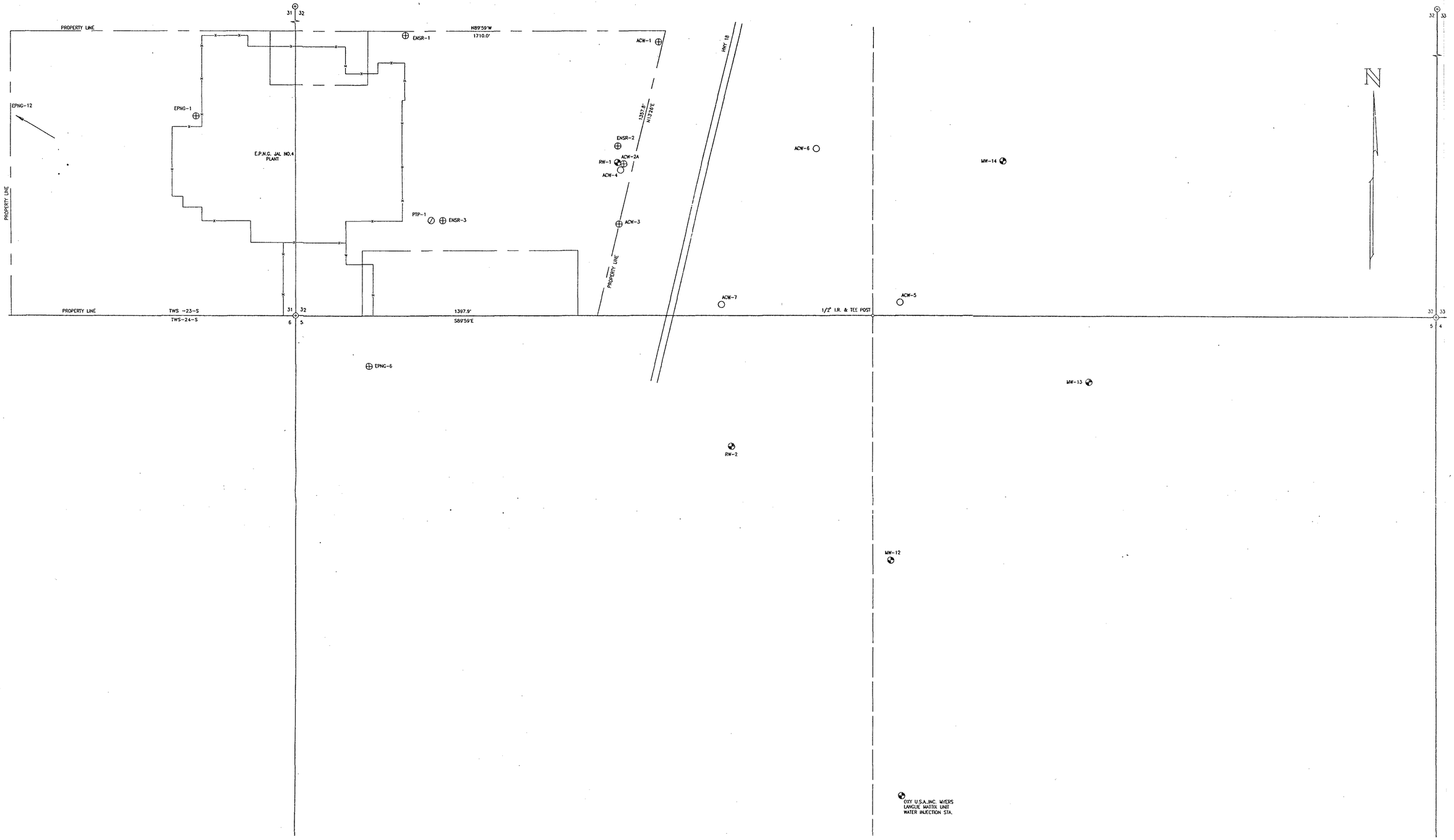
JAL #4 MONITOR WELL

9/30/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.4	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.4	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.4	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.4	570	<0.006	0.48	180	0.71	14	810	<0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4620	7450	6.8	0.36	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
5/8/96	S96-0259	Monitor Well ACW #09	2210	4210	7530	6.8	0.35	<1.25	<0.5	508	0.01	0.4	183	0.49	17	687	<0.05	<1.0	<1.0	<1.0	<3.0	209	2020	3	322	60
8/14/96	S96-0328	Monitor Well ACW #09	1200	3600	4400	7.4	1.4	0.13	0.4	490	<0.006	0.66	160	0.65	13	730	0.027	1.4	1.6	<1.0	<2.0	220	1900	1.2	180	53
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	800	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	819	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.3	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.3	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.2	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.3	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
5/8/96	S96-0261	Monitor Well ACW #10	603	1290	2322	7.2	0.46	2.2	<0.5	206	<0.01	0.1	92	<0.05	8	127	<.05	1.22	<1.0	<1.0	<3.0	137	893	4.5	190	62
8/14/96	S96-0327	Monitor Well ACW #10	560	1900	2400	7.6	1.4	0.58	0.3	210	<0.006	0.14	71	0.019	7	140	0.037	<1.0	<1.0	<1.0	<2.0	170	810	0.82	160	47
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.3	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.4	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.3	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	<0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46
5/8/96	S96-0262	Monitor Well ACW #11	3120	5080	9840	7.3	0.37	<1.25	<0.5	484	0.02	0.3	220	0.09	29	1160	<0.05	6.76	<1.0	<1.0	<3.0	111	2110	<1.25	206	50
8/13/96	S96-0383	Monitor Well ACW #11	4200	10000	12000	7.3	1.0	0.18	0.4	540	0.013	0.28	190	0.061	24	1700	0.12	7.9	2.2	<1.0	<2.0	160	2100	2	230	47

* Analysis done by T.O.E. Lab

JalOgr96.xls


PROPERTY LINE
N89°59'W
1710.0'
ENSR-1
ACW-1
HWY 18
EPNG-12
EPNG-1
E.P.N.G. JAL NO.4 PLANT
1357.8'
N13°26'E
ENSR-2
ACW-2A
RW-1
ACW-4
ACW-6
MW-14
PTP-1
ENSR-3
ACW-3
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
TWS -23-S
TWS-24-S
1397.9'
S89°59'E
ACW-7
1/2" I.R. & TEE POST
ACW-5
EPNG-6
MW-13
RW-2
MW-12
OXY U.S.A.INC. MYERS LANGLIE MATTIX UNIT WATER INJECTION STA.
N

MIDESSA INDUSTRIAL VINYL CO.

RT. 4 5203 WEST 42ND STREET
ODESSA, TEXAS 79763
(915) 381-2077 337-6775

JANUARY 6, 1982

EL PASO NATURAL GAS COMPANY
P. O. BOX 1384
JAL, NEW MEXICO 88252

RE: BRINE POND - SOUTH
JAL N.. 4 GASOLINE PLANT
JAL, NEW MEXICO

Dear Mr. Dakan,

Per your request, I am sending you the final amounts of materials we used in our above referenced project. They are as follows:

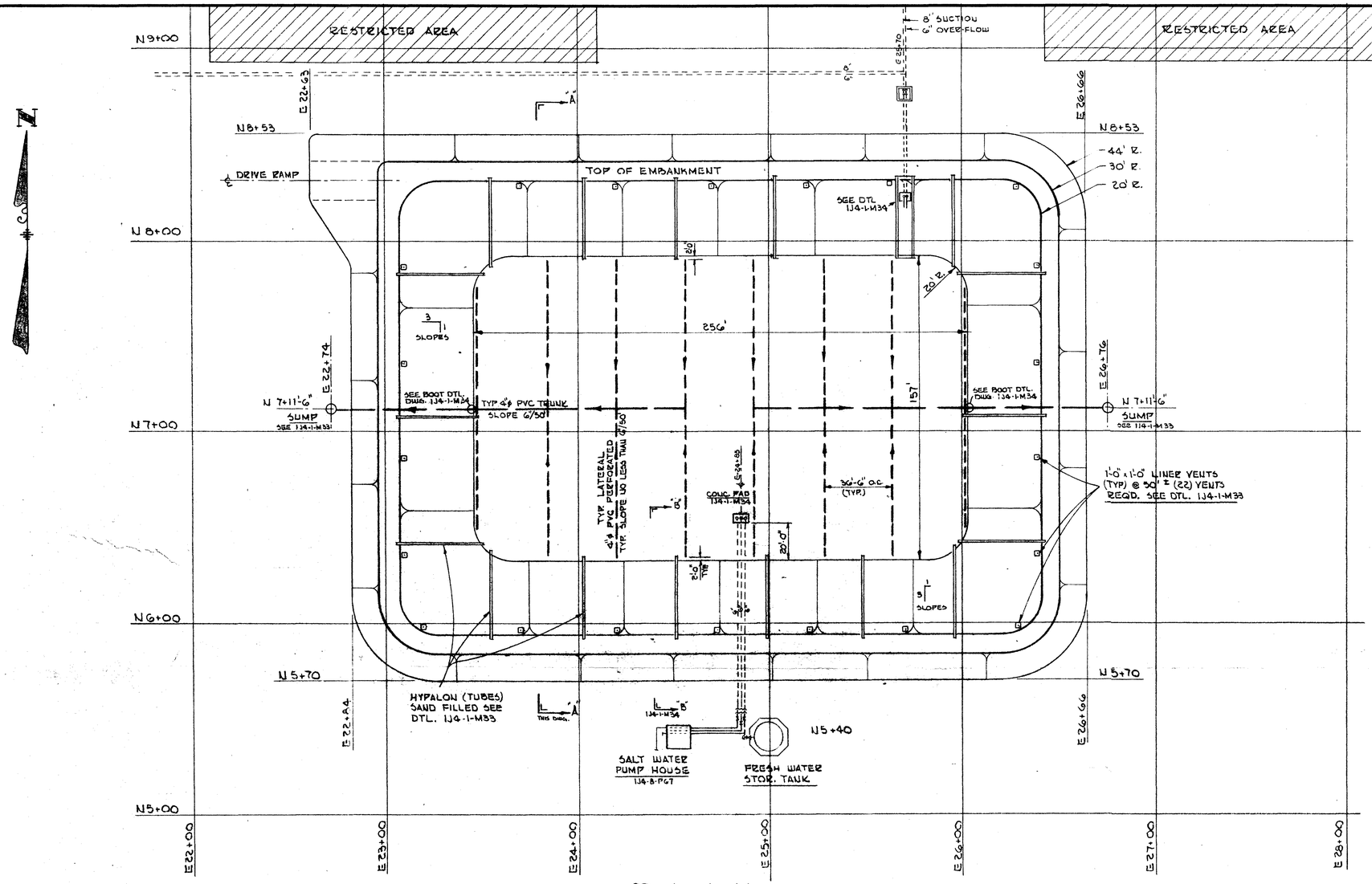
QUANTITIES	ITEMS	UNIT
100,000	BRINE CAPACITY	BBLS.
86,142	Hypalon liner (45mil)	sq.ft.
1,070	Sand	c. y.
42,620	Soil support	sq.ft.
2,270	Gravel	c. y.
85,642	Underliner (30mil)	sq.ft.
32,280	Nonwoven fabric(200m)	sq.ft.
1,210	4"PVC perf. (SDR-41)	l. ft.
430	4"PVC (SDR-26)	l. ft.
144	Caliche	c. y.
230	Blow sand	c.y.
550	Excavation	c. y.

I hope that this will help you in attaining the approval on the project. Should you need more information or if I can be of further help, please do not hesitate to call. It was a pleasure working with you on it.

Warmest regards,

A. G. (GUS) MESA
PROJECT SUPERVISOR

AGM/dv A. G. Mesa



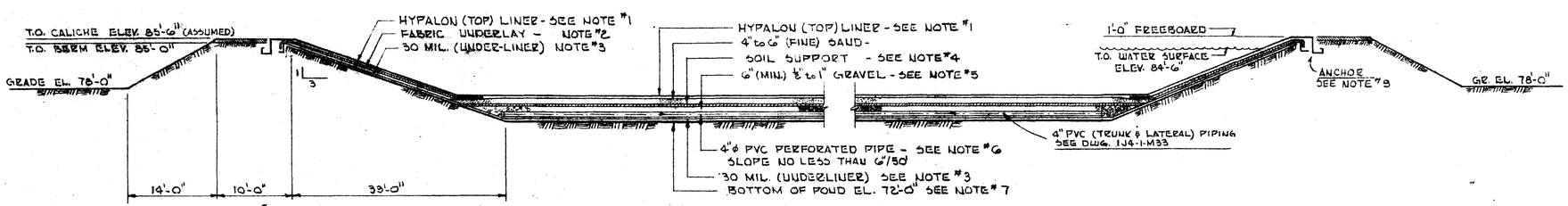
PLAN

SCALE: 1" = 30'

NOTES:

1. TOP LINER - HYPALON 45 MIL. 6x6
2. FABRIC UNDERLAY - FIBRETEX GRADE "600" GEOTEXTILE 200 MIL. (MIN.) (SEE SPEC. SHEET)
3. UNDER-LINER - 30 MIL. OIL RESISTANT PVC LINER (SEE SPEC. SHEET)
4. SOIL SUPPORT - MIRAFT 1405 DRAINAGE FABRIC (SEE SPEC. SHT)
5. GRAVEL - ½" to 1" WASHED GRAVEL, NO CRUSHED ROCK
6. PVC PIPE - (LATERAL) 4"-PVC (PERFORATED) SDR-41 w/ (2) ⅜" ϕ HOLES @ 180° ON 5" o/c - (TOTAL OPEN AREA) .536 IN²/FT. SOLVENT WELD ALL JOINTS.

   PVC PIPE - (TRUNK) 4"-PVC (NON-PERFORATED) SDR-26 SOLVENT WELD ALL JOINTS.
7. B.O. POND - USE (EXISTING) BASE & WALLS. ALL CUTS THRU BASE, WALL OR BERM TO BE RE-COMPACTED TO 90% (MIN.) COMPACTION
8. SUMP - MANUFACTURED FIBERGLASS WELL w/ FITTED LID (MIN) ¼" WALL THICKNESS, 42" O.D. & 12'-0" S/S.
9. ANCHOR - AN ANCHOR TRENCH SHOULD BE LOCATED FROM EDGE OF BERM TO PROVIDE A SUFFICIENT ANCHOR FOR LINER



— SECTION "A-A" —

SCALE: 1" = 10'

ITEMS	QUANTITIES	UNIT
BRINE CAPACITY	100,000	BBLS
INSIDE SURFACE LINER-HYPALON (45 MIL)	86,142	SQ. FT.
SAND	1,070	C.Y.
SOIL SUPPORT	42,620	SQ. FT.
GRAVEL	2,270	C.Y.
INSIDE UNDERLINER (30 MIL)	85,642	SQ. FT.
NON-WOVEN FABRIC (200 MIL)	32,280	SQ. FT.
4"ϕ PVC PERFORATED (SDR-41)	1,210	L.F.
4"ϕ PVC (SDR-26)	380	L.F.
EXCAVATION	550	C.Y.

LEGEND

DWG. NO.	TITLE
1J4-1-M33	LEAK DETECTION SYS. - PLAN, DTL
1J4-1-M 34	BRINE POND - SECT. & DTLS.

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION	W. O.	APP.
A	1-25-82	LJ	REVISED & REDRAWN	K-4275	

REVISIONS

PRT.	SEP.	DATE	TO	W. O.	PRT.	SEP.	DATE	TO	W. O.

PRINT RECORD

ENG. RECORD		DATE
DRAWN	LJ	1-25-82
CHECKED		
CHECKED		
PROJ. APP.		
DESIGN APP.		

El Paso NATURAL GAS COMPANY

JAL Nº 4 GASOLINE PLANT

BRINE POND - SOUTH
— PLAN & PROFILE —

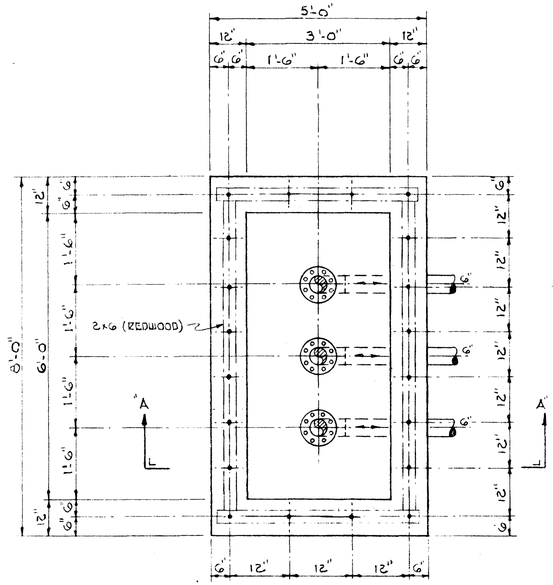
SCALE: NOTED
W.O. K-4275

DWG. NO. 1J4-1-M10

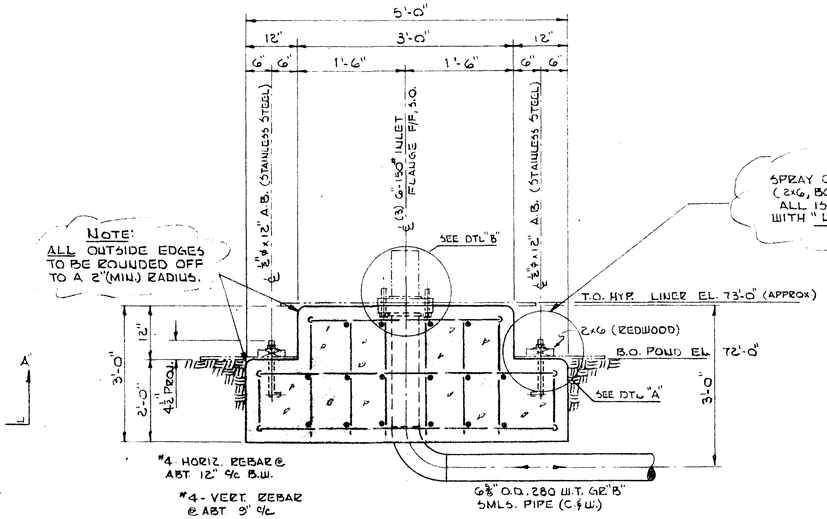
REV. A

JJ4-1-M6

FORM 7-337R (REV. 6-76)

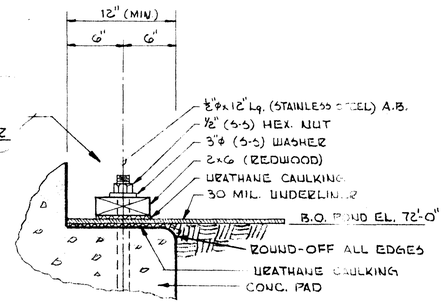


PLAN

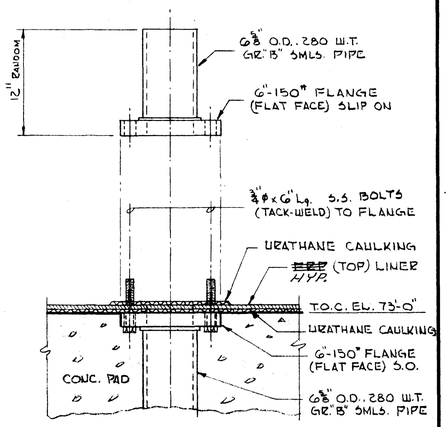


SECTION "A-A"

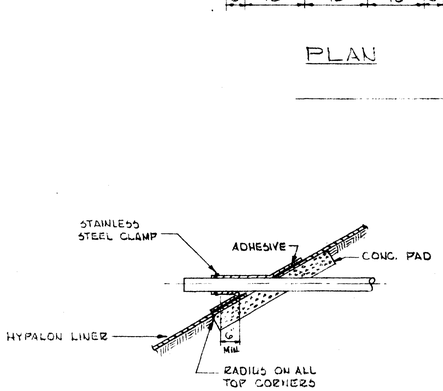
CONCRETE PAD DETAIL



DETAIL "A"

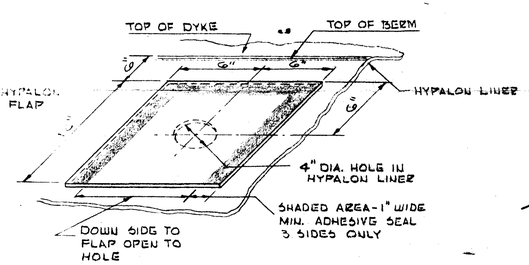


DETAIL "B"



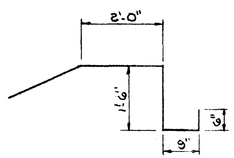
BOOT DETAIL

(13) REQ'D.

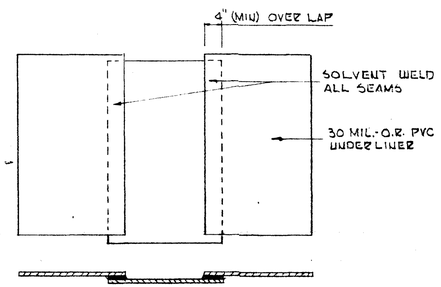


FLAP TYPE VENT - DETAIL

(22) VENTS REQ'D. (1) EA. PER 50'

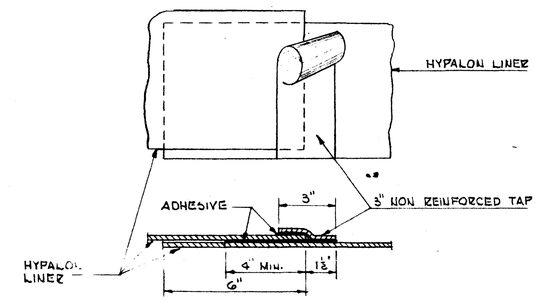


ANCHOR DETAIL



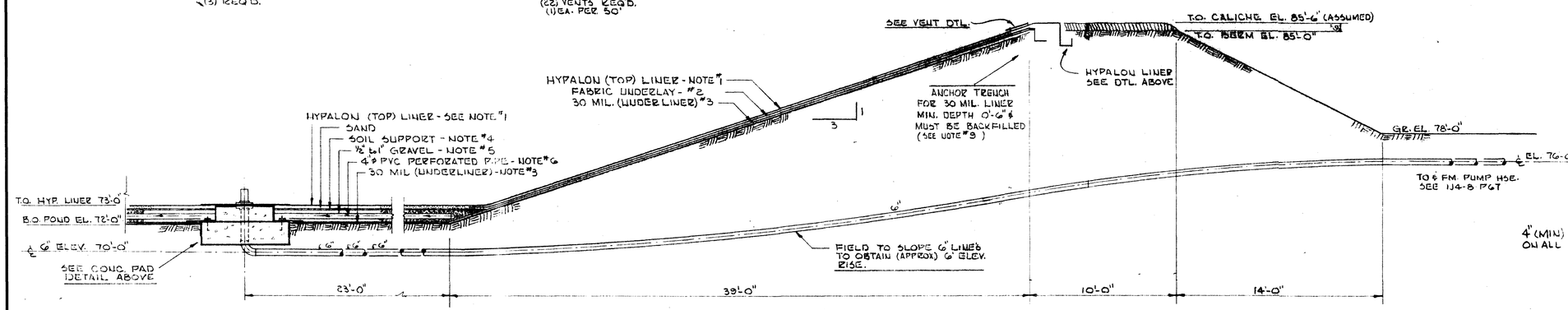
30 MIL - OIL RESISTANT PVC LINER

SEAM SEALING DETAIL



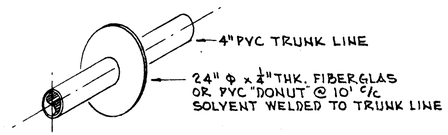
40 MIL - HYPALON LINER

SEAM SEALING DETAIL

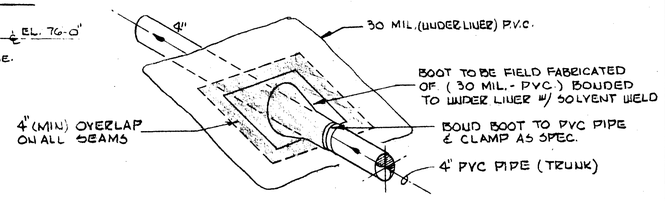


SECTION "B-B"

JJ4-1-M10



WATER STOP BAFFLE DETAIL



UNDERLINER BOOT DETAIL

LEGEND		REFERENCE DRAWINGS
	JJ4-1-M2	LEAK DETECTION SYS - PLAN
	JJ4-1-M10	BRINE POND - PLAN
	DWG. NO.	TITLE

NO.	DATE	BY	DESCRIPTION	W. O.	APP.
REVISIONS					

PRT.	SEP.	DATE	TO	W. O.	PRT.	SEP.	DATE	TO	W. O.
PRINT RECORD									

ENG. RECORD		DATE
DRAWN	LG	1-29-82
CHECKED	S	3-26-82
CHECKED		
PROJ. APP.		
DESIGN APP.		

El Paso NATURAL GAS COMPANY

JAL Nº 4 GASOLINE PLANT

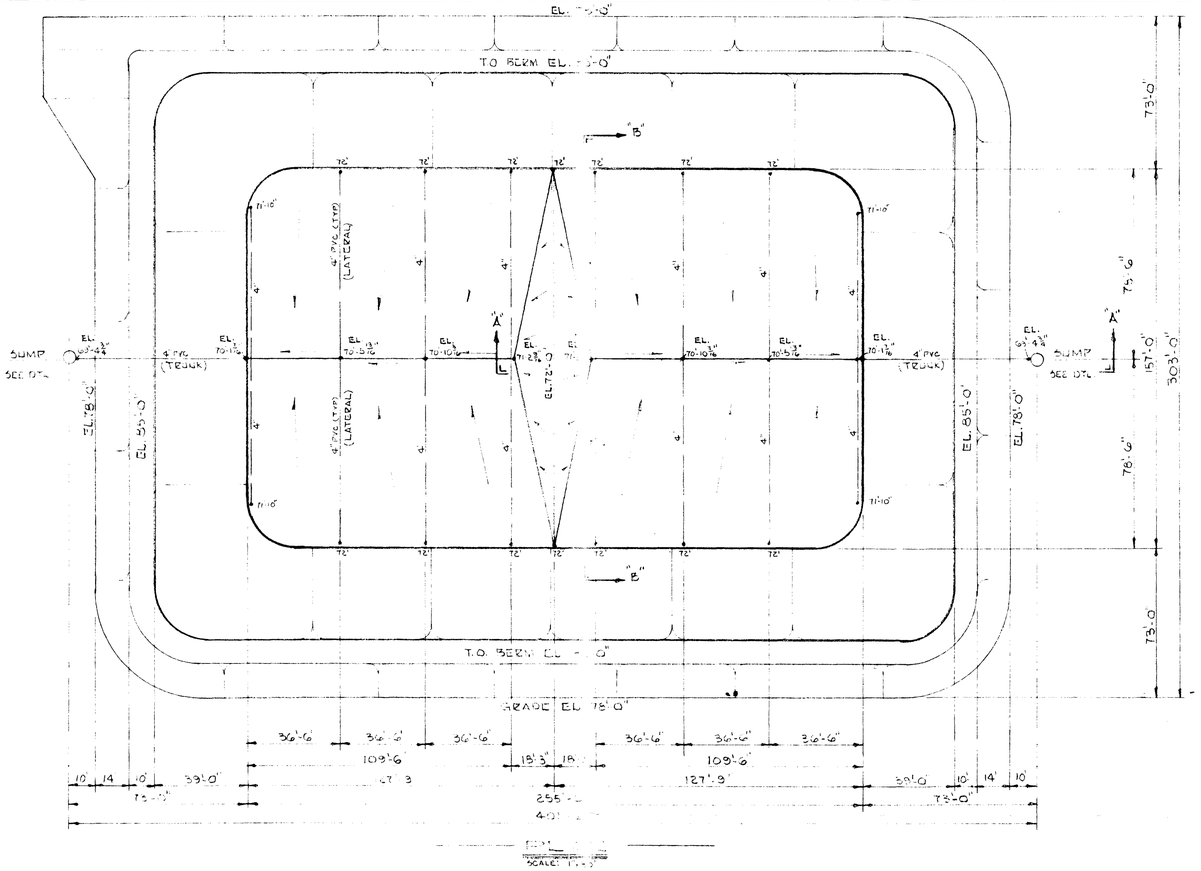
BRINE POND

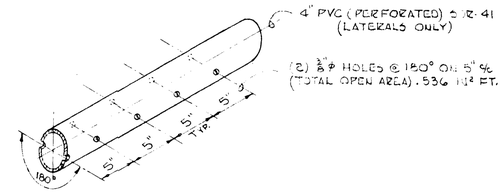
SECTION & DETAILS

SCALE: NONE | DWG. NO. JJ4-1-M1 | REV.

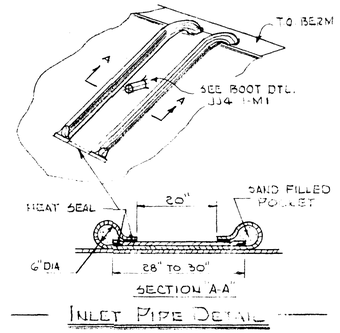
W. O. K-4275

FORM 7-337R (REV. 6-78)

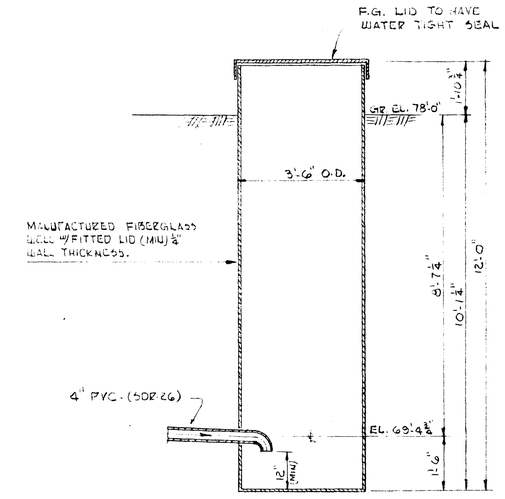




HOLE DRILLING DETAIL



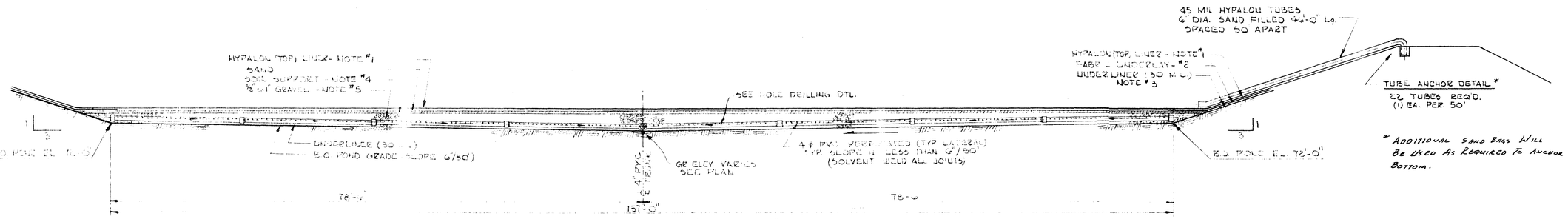
INLET PIPE DETAIL



(TYP) SUMP PIT DETAIL
2-REQ'D.

NOTE:
ALL ELEVATIONS ARE FROM AN (ASSUMED) FLOW. AND FOR (MIN) SLOPE 6"/50'. ALL ELEV. TO BE VARIFIED IN FIELD BEFORE LEAK DETECTION SYSTEM IS INSTALLED.

TYP. TRUNK LINE & SECTION "A-A"
SCALE: 3/8"=1'-0"



* ADDITIONAL SAND BAGS WILL BE USED AS REQUIRED TO ANCHOR BOTTOM.

TYP. LATERAL & SECTION "B-B"

LEGEND		

REFERENCE DRAWINGS	
JJ4-1-M1	SECTION & DTLS.
JJ4-1-M13	BRINE POND - PLAN
DWG. NO.	TITLE

NO.	DATE	BY	DESCRIPTION	W. O.	APP.

PRT. SEP.	DATE	TO	W. O.	PRT. SEP.	DATE	TO	W. O.

ENG. RECORD		DATE
DRAWN		2-4-92
CHECKED		3/26/92
CHECKED		
PROJ. APP.		
DESIGN APP.		

El Paso NATURAL GAS COMPANY

JAL Nº 4 GASOLINE PLANT

BRINE POND - LEAK DETECTION SYSTEM
PLAN, SECTION, & DTLS.

SCALE: NOTED | DWG. NO. JJ4-1-M2 | REV.
W.O. K-4275

K+E ALBANENE TRACING PAPER

FORM 7-337R (REV. 7-

MIDESSA INDUSTRIAL VINYL CO.

RT. 4 5203 WEST 42ND STREET
ODESSA, TEXAS 79763
(915) 381-2077 337-6775

JANUARY 6, 1982

EL PASO NATURAL GAS COMPANY
P. O. BOX 1384
JAL, NEW MEXICO 88252

RE: BRINE POND - NORTH
JAL No. 4 GASOLINE PLANT
JAL, NEW MEXICO

Dear Mr. Dakan,

Per your request, I am sending you the final amounts of materials we used in our above referenced project. They are as follows:

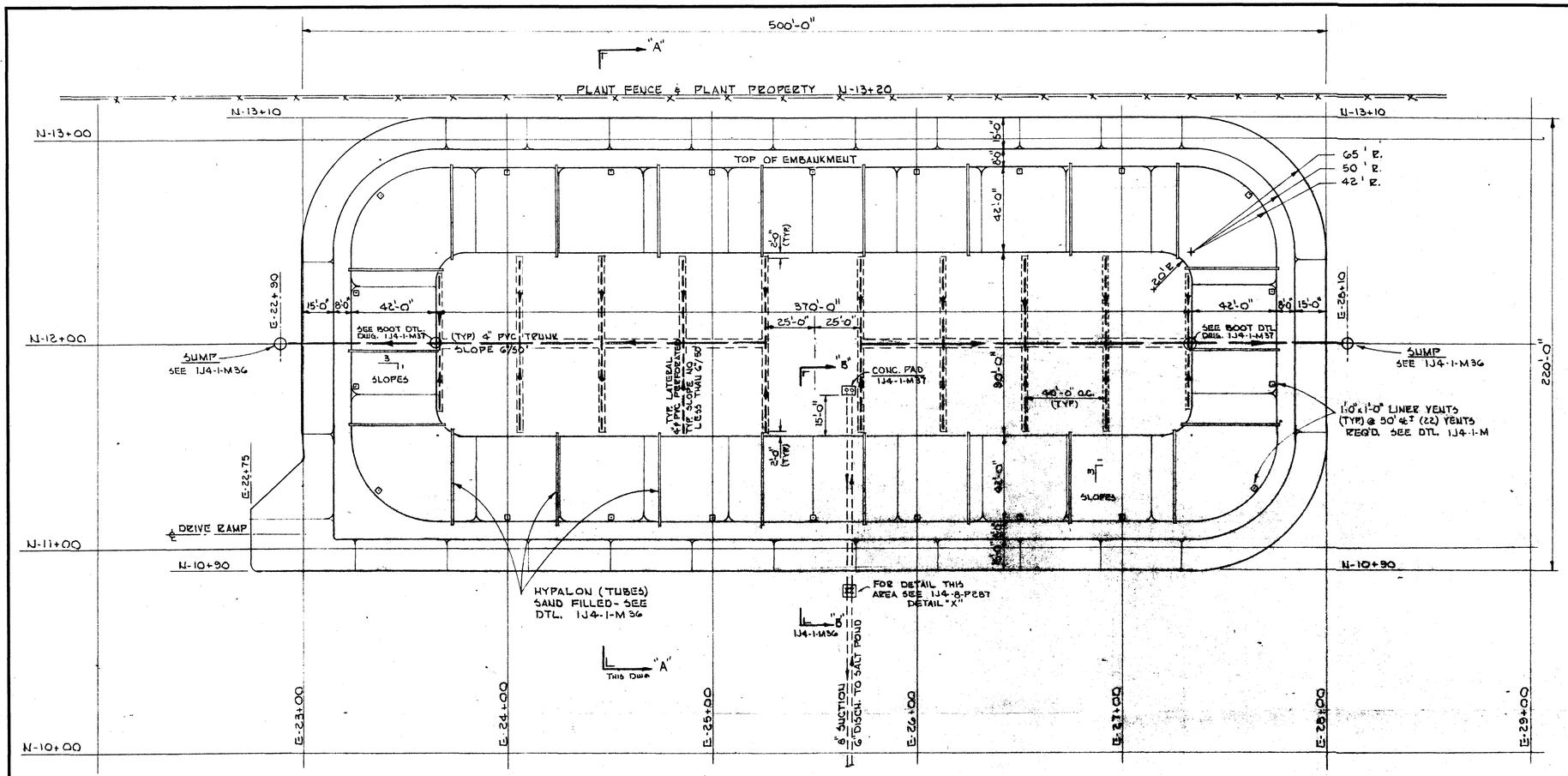
QUANTITIES	ITEMS	UNIT
112,919	BRINE CAPACITY	BBLS.
88,641	Hypalon liner(45mil)	sq.ft.
1,410	Sand	c. y.
8,760	Soil support	sq.ft.
133	Gravel	c. y.
93,159	Underliner (30mil)	sq.ft.
54,488	Nonwoven fabric(190mil)	sq.ft.
898	4" PVC Perf. (SDR-41)	l. ft.
470	4" PVC (SDR-26)	l. ft.
150	Caliche	c. y.
4,800	Excavation	c. y.

I hope that this will help you in attaining the approval on the project. Should you need more information or if I can be of further help, please do not hesitate to call. It was indeed a pleasure working with you.

Warmest regards,

A. G. (GUS) MESA
PROJECT SUPERVISOR

AGM/dv A. G. Mesa



PLAN

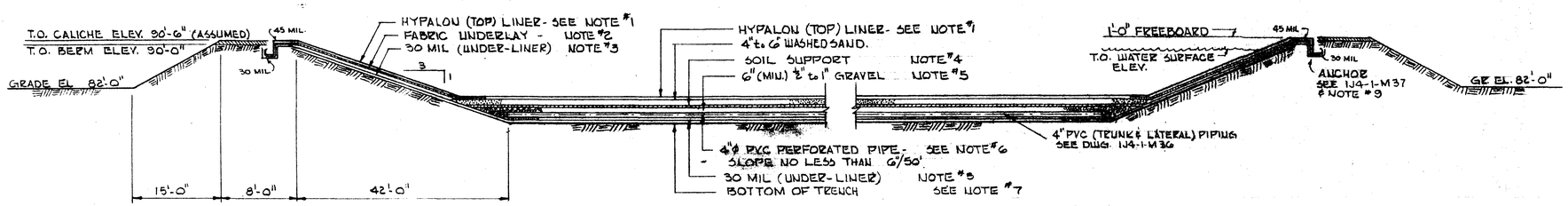
SCALE: 1"=30'

NOTES:

1. TOP LINER:- HYPALON 45 MIL. 6×6
2. FABRIC UNDERLAY:- FIBRETEX GRADE "600" GEOTEXTILE 190 MIL. (MIN.) SEE SPEC. SHEET
3. UNDER-LINER:- 30 MIL. OIL RESISTANT PVC LINER (SEE SPEC. SHEET)
4. SOIL SUPPORT:- MIRAFT 140 DRAINAGE FABRIC (SEE SPEC.)
5. GRAVEL:- ½" to 1" WASHED GRAVEL, NO CRUSHED ROCK
6. PVC PIPE:-(LATERAL) 4" PVC (PERFORATED) SDR-41 4"/(2) 5/8" ø HOLES @ 120° ON 5" ⅌ (TOTAL OPEN AREA) 1.47 IN²/FT. SOLVENT WELD ALL JOINTS.

   PVC PIPE:- (TRUNK) 4" PVC (NON-PERFORATED) SDR-26 SOLVENT WELD ALL JOINTS.
7. B.O. POND:- USE (EXISTING) BASE & WALLS, ALL CUTS THRU BASE, WALL OR BERM TO BE RE-COMPACTED TO 95% (MIN.) COMPACTION.
8. SUMP:- MANUFACTURED FABERGLASS WELL w/ FITTED LID (MIN) ¼" WALL THICKNESS, 48" O.D & 12'-⅌
9. ANCHOR:- AN ANCHOR TRENCH SHOULD BE LOCATED FM. EDGE OF BERM TO PROVIDE A SUFFICIENT ANCHOR FOR LINER & UNDERLINER.

ELEVATION NOTE AS SHOWN ON 1J4-1-M36



— SECTION "A-A" —

NOTE: SECTION CUT THRU ℄ TRENCH

ITEMS	QUANTITIES	UNIT
BRINE CAPACITY	112,919	BBLS
INSIDE SURFACE LINER- HYPALON (45 MIL)	88,641	SQ. FT.
SAND	1,410	C.Y.
SOIL SUPPORT	8,760	SQ. FT.
GRAVEL	130	C.Y.
INSIDE UNDERLINER (30 MIL)	93,159	SQ. FT.
NON-WOVEN FABRIC (190 MIL)	54,488	SQ. FT.
4" ø PVC PERFORATED (SDR-41)	300	L.F.
4" ø PVC (SDR-26)	470	L.F.
CALICHE	150	C.Y.
EXCAVATION	4,800	C.Y.

LEGEND

DWG. NO.	TITLE
1J4-1-M36	LEAK DETECTION SYS. - PLAN
1J4-1-M37	BRINE POND - SECT. & DTLS.

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION	W.O.	APP.
A	7-15-82	LJ	REVISED GR. ELEV.		

REVISIONS

PRT.	SEP.	DATE	TO	W.O.	PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

ENG. RECORD		DATE
DRAWN	LJ	5-17-82
CHECKED		
CHECKED		
PROJ. APP.		
DESIGN APP.		

El Paso NATURAL GAS COMPANY

JAL Nº 4 GASOLINE PLANT

BRINE POND - NORTH

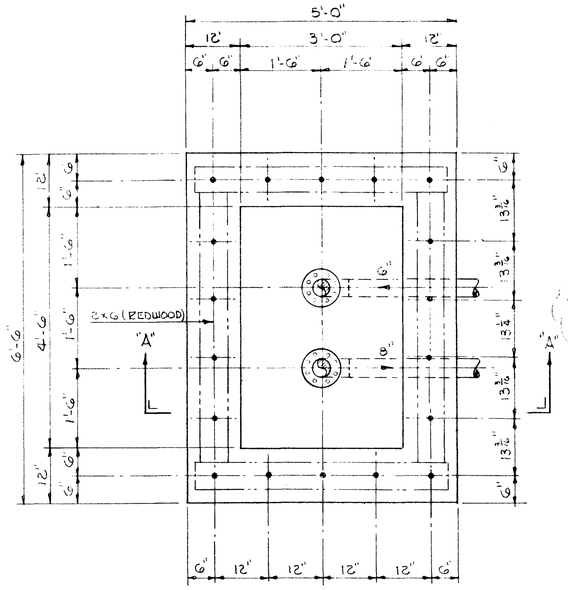
— PLAN & PROFILE —

SCALE: NOTED | DWG. NO. 1J4-1-M35 | REV. A

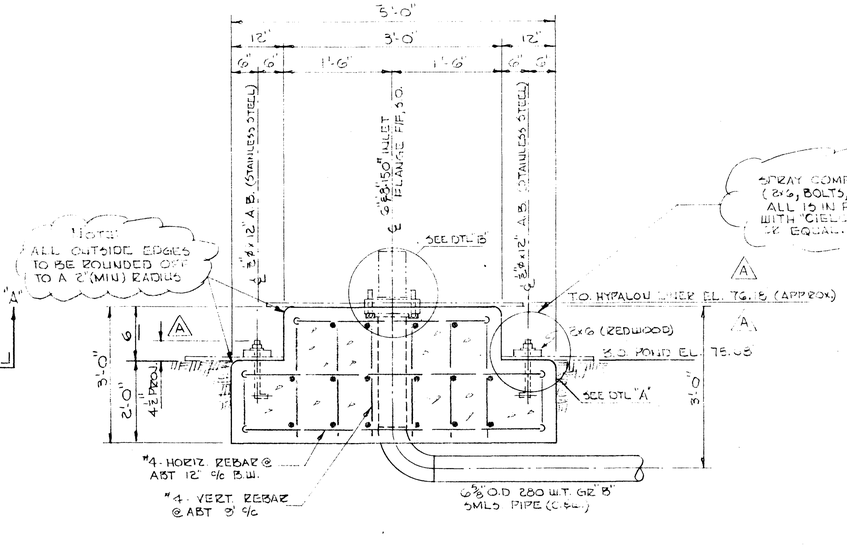
W.O. K-42.76

JJ4-1-M9

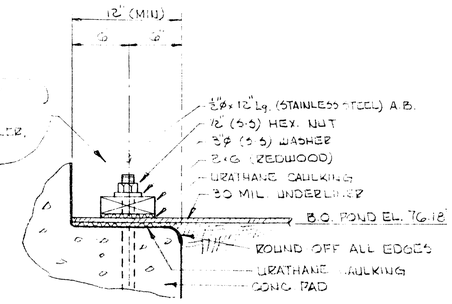
FORM 7-337R (REV. 6-76)



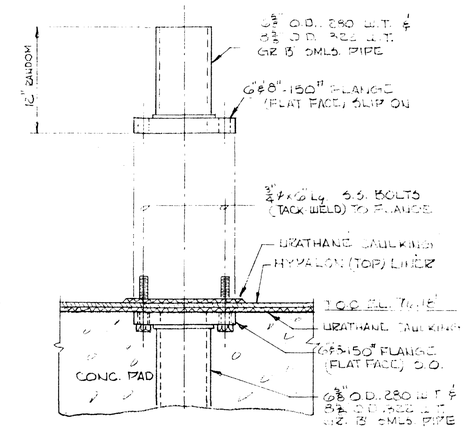
PLAN



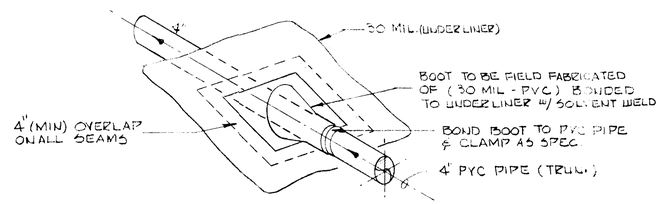
SECTION "A A"



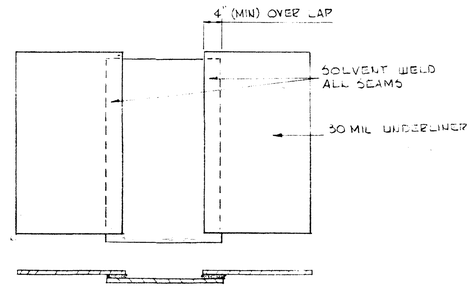
DETAIL "A"



DETAIL "B"



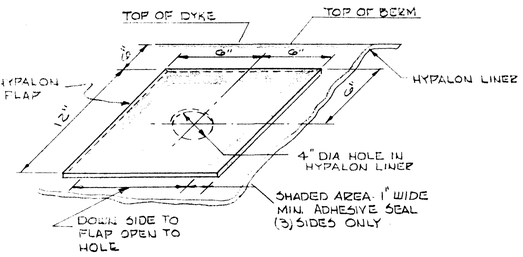
UNDERLINER BOOT DETAIL



30 MIL - OIL RESISTANT PVC LINER

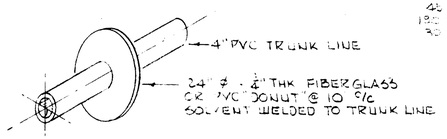
SEAM SEALING DETAIL

* ALL MATERIAL NOTES - REFER TO DWG. IJ4-1-M35

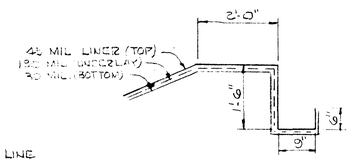


FLAP TYPE VENT - DETAIL

(22) VENTS REQD. (1) EA. PER 50'

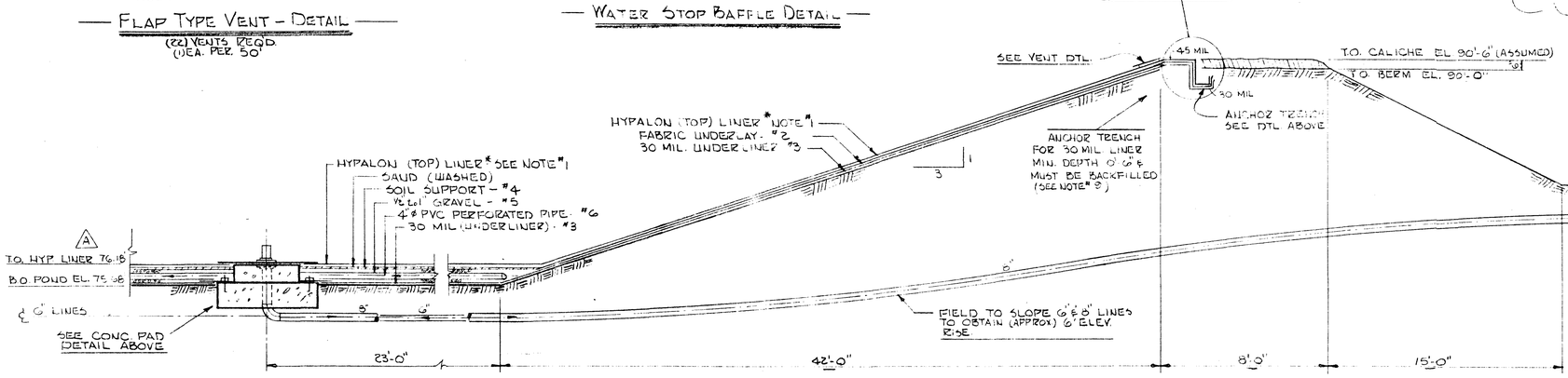


WATER STOP BAFFLE DETAIL



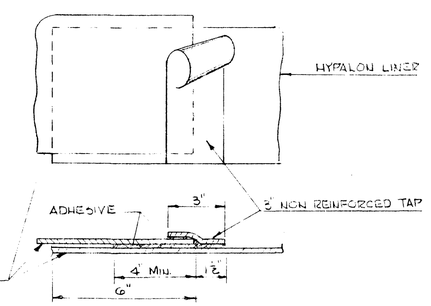
ANCHOR DETAIL

ELEVATION NOTE:
ELEVATIONS SHOWN (ASSUMED)
ALL ELEVATIONS TO BE FIELD CHECKED



SECTION "B-B"

IJ4-1-M35



45 MIL - HYPALON LINER SEAM SEALING DETAIL

LEGEND	REFERENCE DRAWINGS		REVISIONS						PRINT RECORD									
	DWG. NO.	TITLE	NO.	DATE	BY	DESCRIPTION	W.O.	APP.	PRT.	SEP.	DATE	TO	W.O.	PRT.	SEP.	DATE	TO	W.O.
	IJ4-1-M36	LEAK DETECTION - SECT-DTL	B	4-20-83	LJ	FIELD AS-BUILT												
	IJ4-1-M35	BRINE POND - PLAN	A	7-15-82	LJ	REVISED OR ELEV.												

ENG. RECORD		DATE
DRAWN	LJ	5-20-82
CHECKED		
CHECKED		
PROJ. APP.		
DESIGN APP.		

El Paso NATURAL GAS COMPANY

JAL Nº4 GASOLINE PLANT

BRINE POND - NORTH SECTION & DETAILS

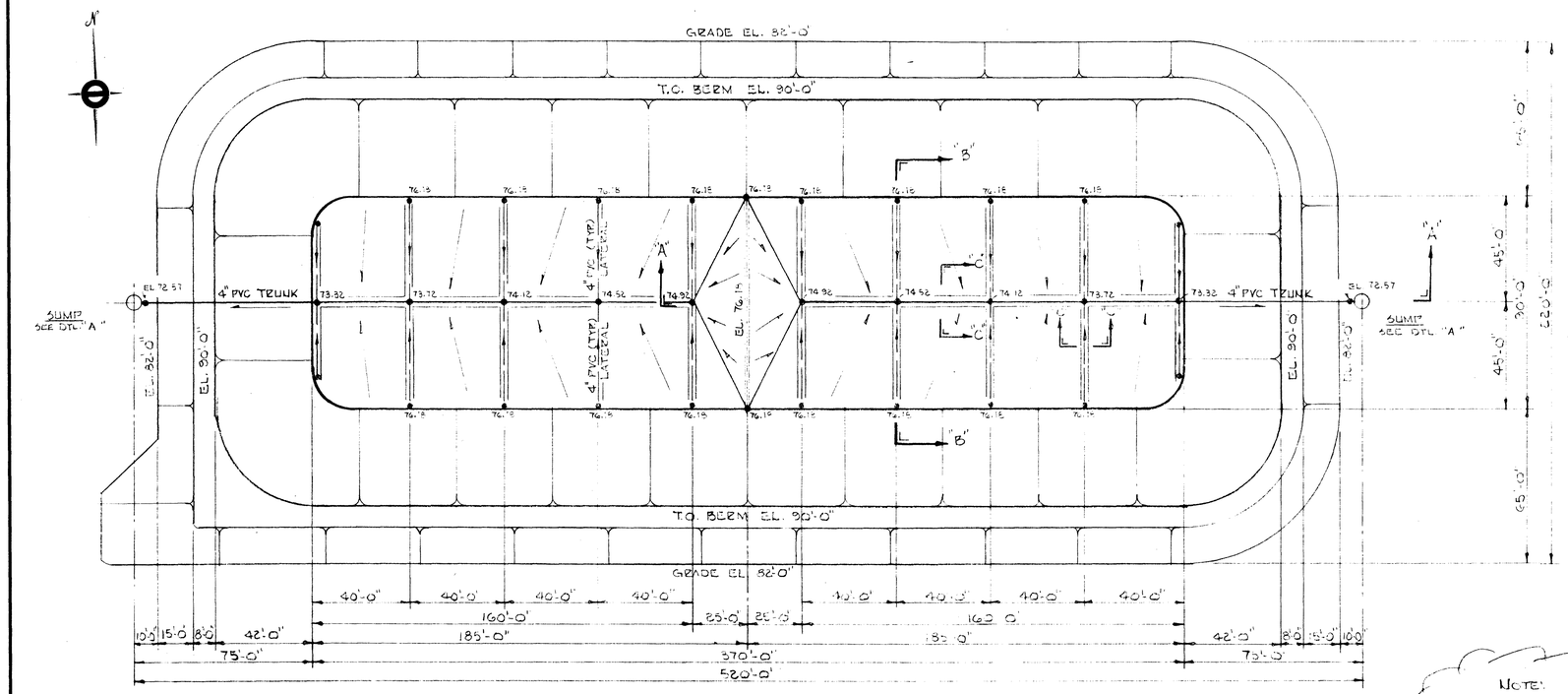
SCALE: NONE | DWG. NO. IJ4-1-M37 | REV. B

W.O.K. 4275

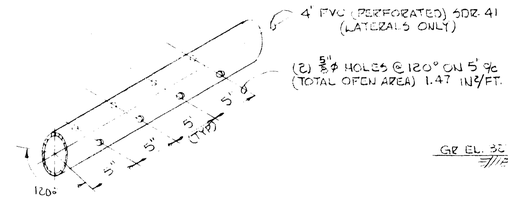
JJ4-1-M11

K+E ALBANENE® TRACING PAPER

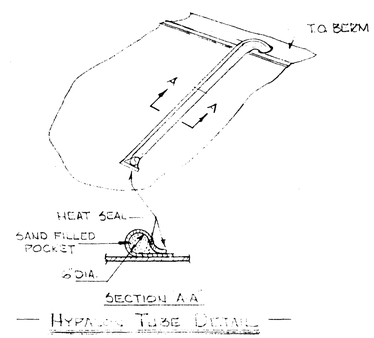
FORM 7-337R (REV. 6-76)



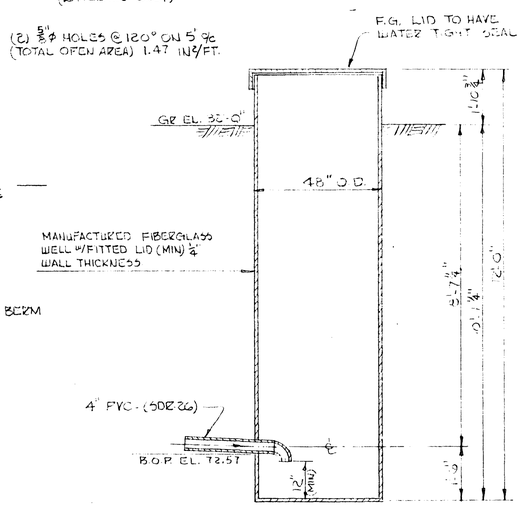
PLAN
SCALE 1"=30'



HOLE DRILLING DETAIL

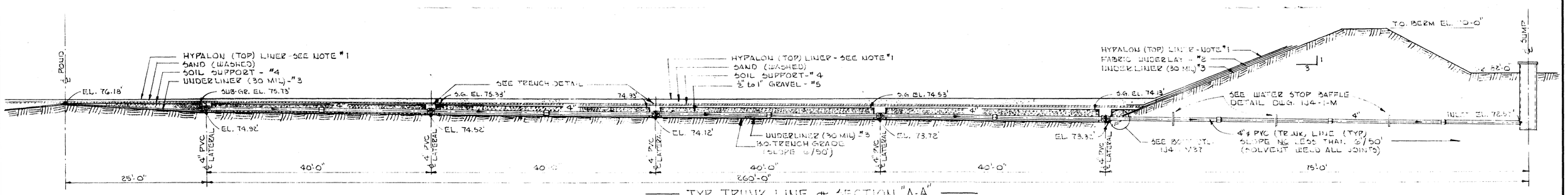


SECTION A-A
HYPALON TUBE DETAIL

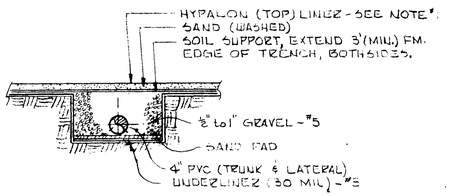


(TYP) SUMP PIT DETAIL
2 REQ'D.

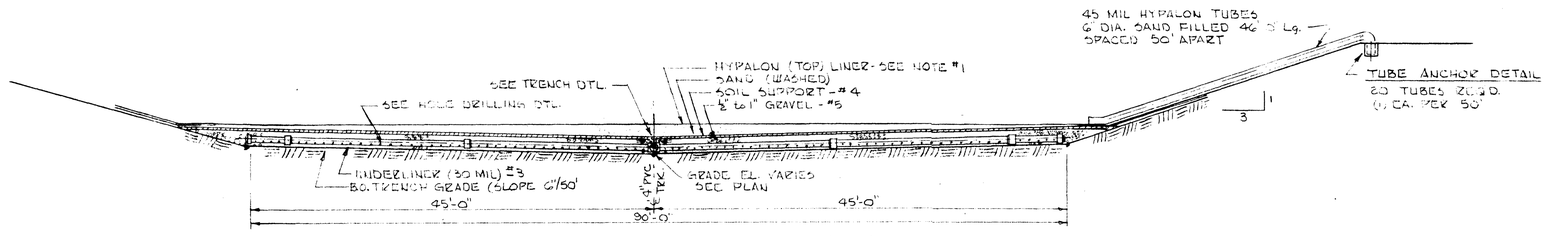
NOTE:
ALL ELEVATIONS ARE FROM AN (ASSUMED) ELEV. AND FOR (MIN) SLOPE 6"/50'. ALL ELEV TO BE VARIFIED IN FIELD BEFORE LEAK DETECTION SYSTEM IS INSTALLED.



TYP TRUNK LINE & SECTION "A-A"
NOTE: SECTION CL. THRU ℄ TRENCH



(TYP) TRENCH DETAIL
SECTION "C-C"



TYP LATERAL & SECTION "B-B"
NOTE: SECTION CL. THRU ℄ TRENCH

DWG. NO.	TITLE
1J4-1-M 37	SECTION & DETAILS
1J4-1-M 35	BRINE POND-NORTH - PLAN

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION	W. O.	APP.
B	1-20-83	LJ	FIELD AS-BUILT	K-4275	
A	1-15-82	LJ	REVISED ALL G-Z ELEV. & TRENCH DTL.	K-4275	

REVISIONS

PRINT RECORD: PRT. SEP. DATE TO W. O. PRT. SEP. DATE TO W. O.

LEGEND

ENG. RECORD		DATE
DRAWN	LJ	5-19-82
CHECKED		
CHECKED		
PROJ. APP.		
DESIGN APP.		

El Paso NATURAL GAS COMPANY

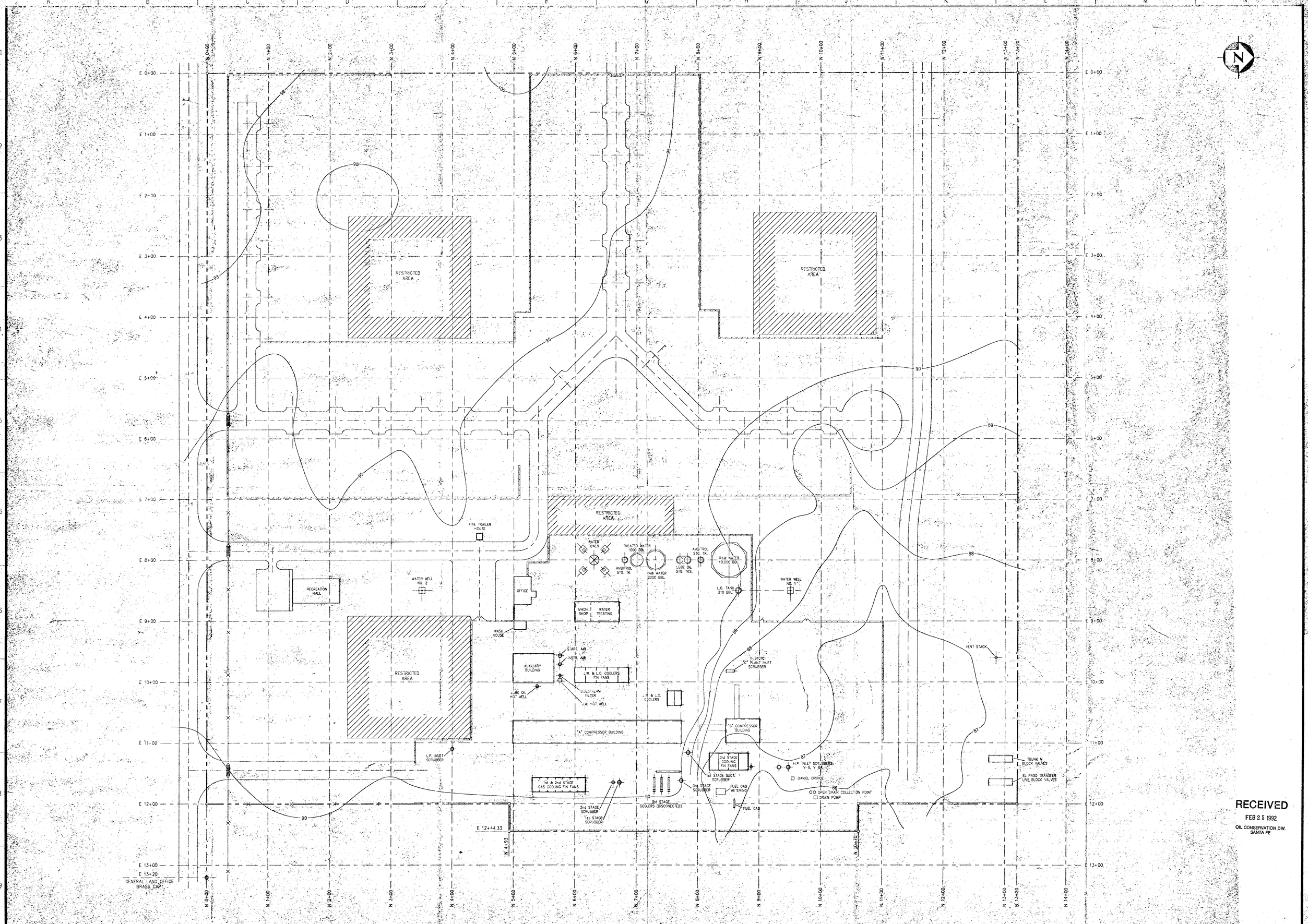
JAL Nº 4 GASOLINE PLANT

BRINE POND-NORTH & LEAK DETECTION
— PLAN, SECTION & DTLS —

SCALE: NOTED | DWG. NO. 1J4-1-M36 | REV. B
W.O. K-4275

JJ4-1-M10

FORM 7-337R (REV. 6-76)



RECEIVED
FEB 25 1992
OIL CONSERVATION DIV.
SANTA FE

NOTES:

REVISIONS					
NO	DATE	DESCRIPTION	BY	CH'K'D	APP'D

REFERENCE DRAWINGS	
DRAWING NUMBER	DRAWING DESCRIPTION

CONFIDENTIAL

THIS DRAWING IS BASED ON LICENSED INFORMATION AND IS NOT TO BE USED OTHER THAN IN THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE PLANT FOR WHICH IT WAS PREPARED.

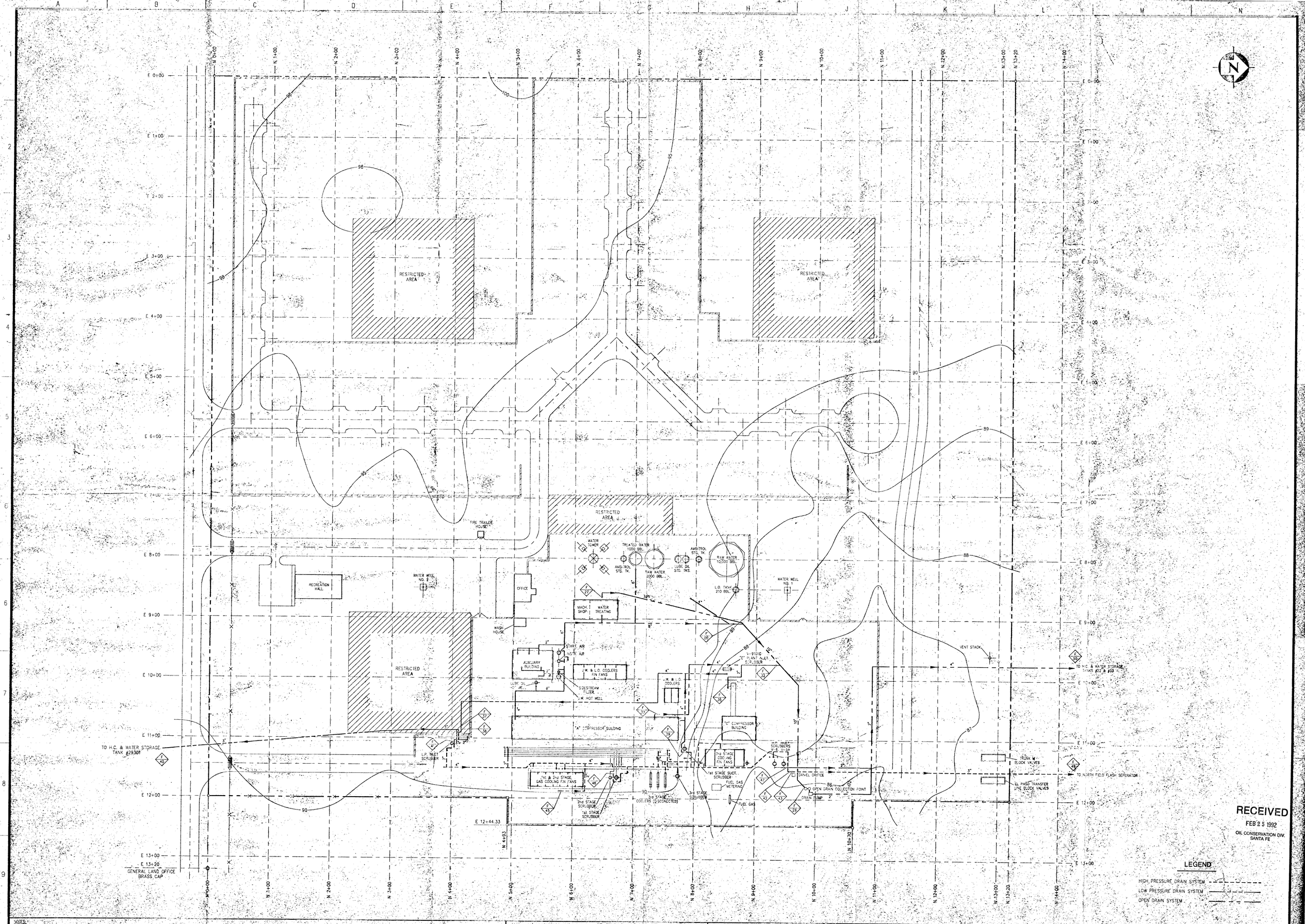
ISSUE RECORD				
DATE	NO	REV	TO	FOR
12/9/91	1	0	CLIENT	APPROVAL

ENGINEERING RECORD		
DRAWN BY	D.E. MOORE	11/26/91
CHECKER		
SQUAD LEADER		
PROCESS ENGINEER		
PROJECT ENGINEER		
PROJECT MANAGER		

TPA, Inc. Consultants/Engineers/Managers
Dallas, Texas

PLOT PLAN
JAL 4 COMPRESSOR FACILITY
JAL, LEA CO., NEW MEXICO

CLIENT: S.O. RICHARDSON CARBON & GASOLINE CO. — JAL, NEW MEXICO
SCALE: 1"=50'-0" | FILE NAME: 1098-101 | JOB No.: 1098
DRAWING NUMBER: D-1098-101 | OWNERS DRAWING NUMBER: J4-PP-001 | REVISION: 0



RECEIVED
FEB 25 1992
OIL CONSERVATION DIV.
SANTA FE

LEGEND

HIGH PRESSURE DRAIN SYSTEM
LOW PRESSURE DRAIN SYSTEM
OPEN DRAIN SYSTEM

NOTES:

REVISIONS					
NO	DATE	DESCRIPTION	BY	CHK'D	APP'D

REFERENCE DRAWINGS	
DRAWING NUMBER	DRAWING DESCRIPTION

CONFIDENTIAL

THIS DRAWING IS BASED ON LICENSED INFORMATION AND IS NOT TO BE USED OTHER THAN IN THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE PLANT FOR WHICH IT WAS PREPARED.

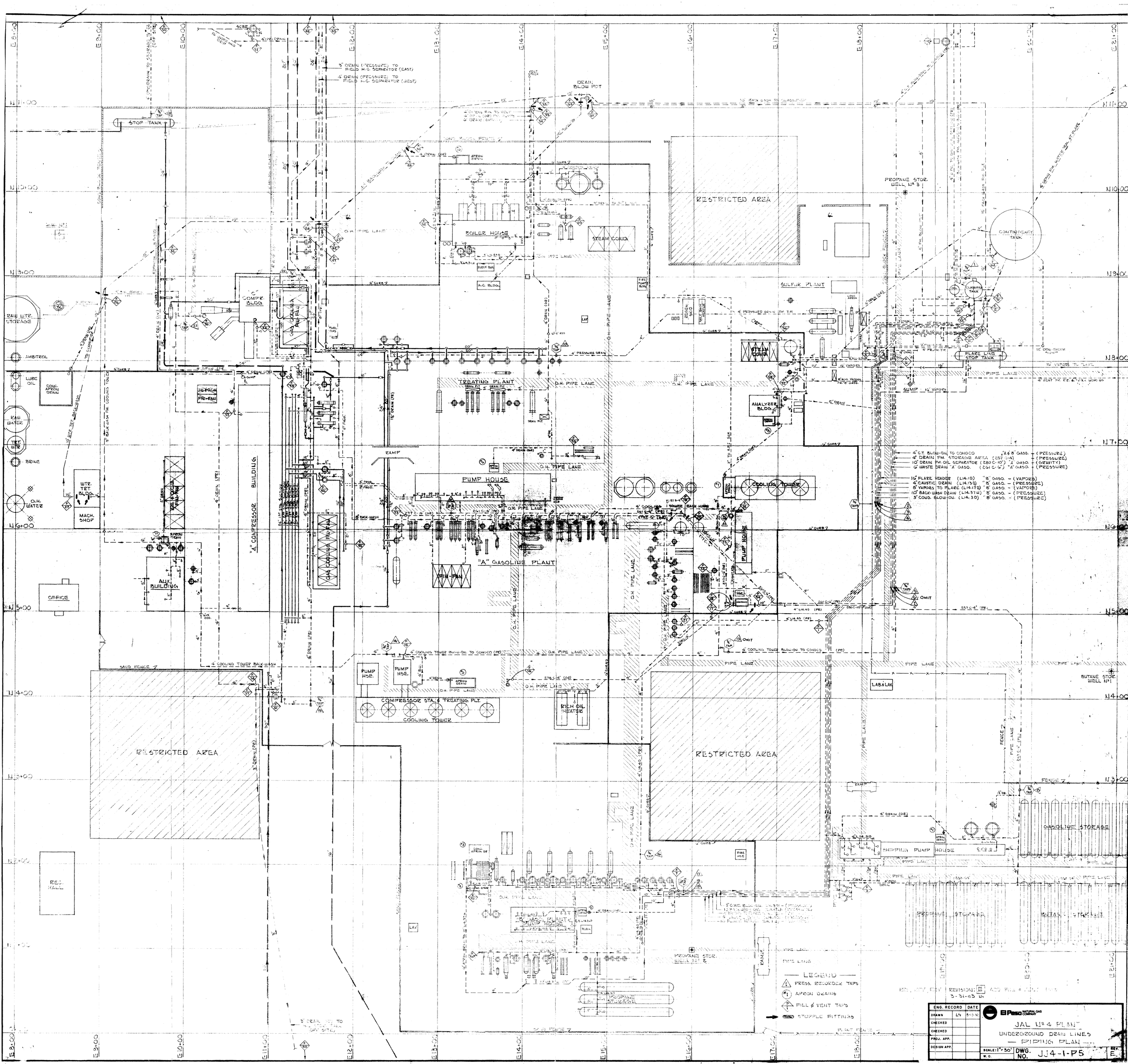
ISSUE RECORD				
DATE	NO	REV.	TO	FOR
12/9/91	1	0	CLIENT	APPROVAL

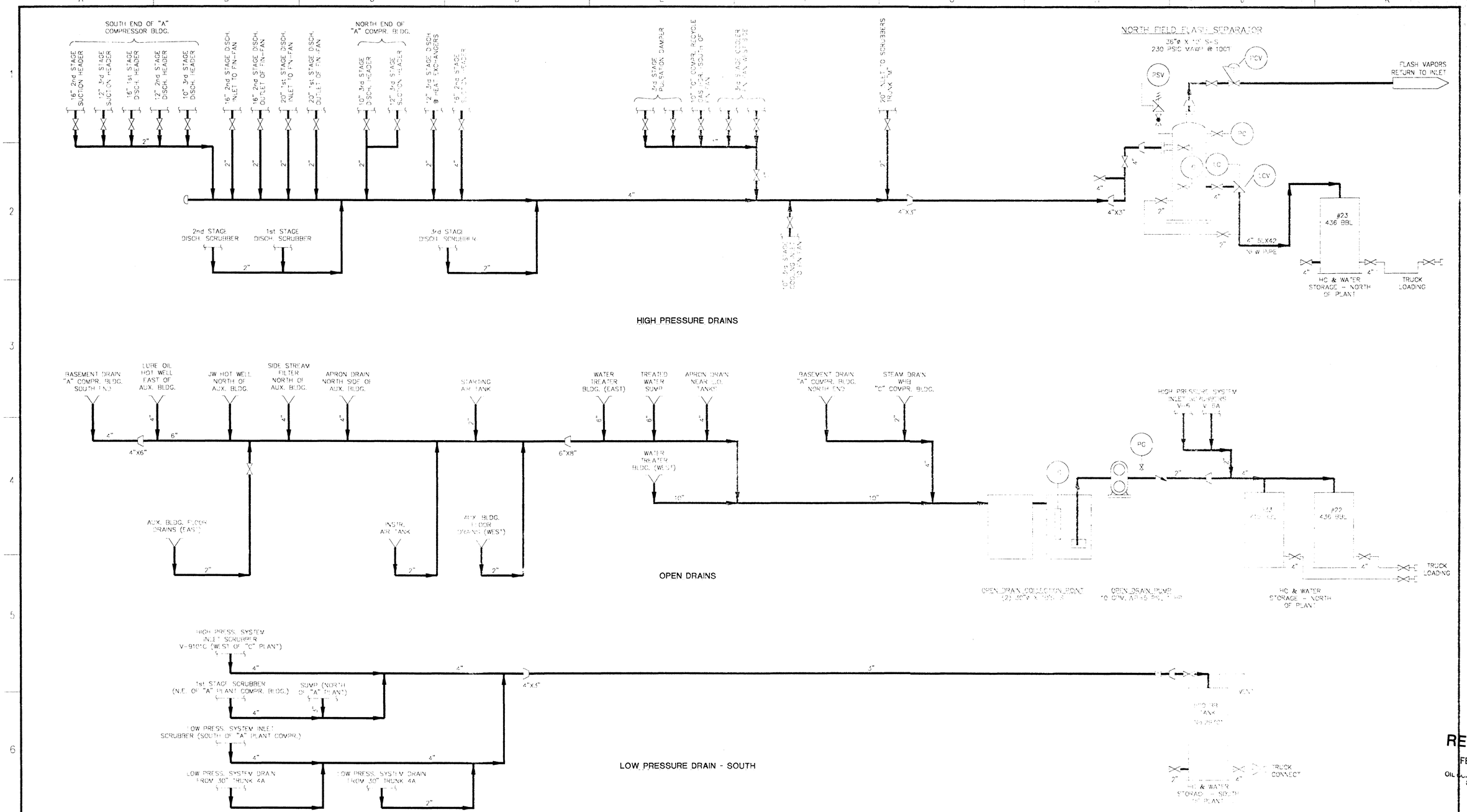
ENGINEERING RECORD		
DRAWN BY	D.E.MOORE	11/26/91
CHECKER		
SQUAD LEADER		
PROCESS ENGINEER		
PROJECT ENGINEER		
PROJECT MANAGER		

TPA, Inc. Consultants/Engineers/Managers Dallas, Texas

DRAIN SYSTEMS
JAL 4 COMPRESSOR FACILITY
JAL, LEA CO., NEW MEXICO

CLIENT: SID RICHARDSON CARBON & GASOLINE CO. JAL, NEW MEXICO
SCALE: 1"=50'-0" FILE NAME: 1098-102 JOB No.: 1098
DRAWING NUMBER D-1098-102 OWNERS DRAWING NUMBER J4-D-002 REVISION 0


STOP TANK
BOILER HOUSE
STEAM COND.
RESTRICTED AREA
PROPANE STOR. WELL Nº 3
CONTINGENCY TANK
SULFUR PLANT
FLARE LINE STOP TANK
"C" COMPR. BLDG.
RAW WTR. STORAGE
AMBITROL
LUBE OIL
RAW WATER
BRINE
O.H. WATER
WTR. TRT. BLDG.
MACH. SHOP
OFFICE
AUX. BUILDING
"A" COMPRESSOR BUILDING
TREATING PLANT
PUMP HOUSE
"A" GASOLINE PLANT
COOLING TOWER
ANALYZER BLDG.
PUMP HSE.
COMPRESSOR STA. & TREATING PLT.
RICH OIL HEATER
LAB. & LAV.
SHIPPING PUMP HOUSE
GASOLINE STORAGE
PROPANE STORAGE
BUTANE STORAGE
BUTANE STOR. WELL Nº 1
PROPANE STOR. WELL Nº 2
RED HALL
O.H. PIPE LANE
PIPE LANE
RAMP
SAND FENCE
FENCE
PLANT FENCE
4" C.T. BLOW-DN. TO CONOCO (A6.8" GASO. - (PRESSURE)
4" DRAIN FM. STORAGE AREA (257.0-4) - (PRESSURE)
10" DRAIN FM. OIL SEPARATOR (280.0-10") "A" GASO. - (GRAVITY)
6" WASTE DRAIN "A" GASO. (261.0-6") "A" GASO. - (PRESSURE)
16" FLARE HEADER (L14.1D) "B" GASO. - (VAPORS)
4" CAUSTIC DRAIN (L14.13D) "B" GASO. - (PRESSURE)
8" VAPORS TO FLARE (L14.17D) "B" GASO. - (VAPORS)
10" BACK-WASH DRAIN (L14.31W) "B" GASO. - (PRESSURE)
3" COND. BLOW-DN. (L14.3D) "B" GASO. - (PRESSURE)
LEGEND
PRESS. RECORDER TAPS
APRON DRAINS
FILL & VENT TAPS
STOPPLE FITTINGS
REVISION: E ADD FILL & VENT TAPS 3-31-83
ENG. RECORD
DATE
DRAWN
CHECKED
CHECKED
PROJ. APP.
DESIGN APP.
El Paso NATURAL GAS COMPANY
JAL Nº 4 PLANT
UNDERGROUND DRAIN LINES
— PIPING PLAN —
SCALE: 1" = 30'
W.O.
DWG. NO. JJ4-1-P5
REV. E



NOTES:

REVISIONS					
NO	DATE	DESCRIPTION	BY	CHK'D	APP'D

REFERENCE DRAWINGS	
DRAWING NUMBER	DRAWING DESCRIPTION

CONFIDENTIAL

THIS DRAWING IS BASED ON LICENSED INFORMATION AND IS NOT TO BE USED OTHER THAN IN THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE PLANT FOR WHICH IT WAS PREPARED.

ISSUE RECORD				
DATE	NO	REV	TO	FOR
12/8/97		0	CLIENT	APPROVAL

ENGINEERING RECORD		
DRAWN BY	NELSON	11/22/97
CHECKER		
SQUAD LEADER		
PROCESS ENGINEER		
PROJECT ENGINEER		
PROJECT MANAGER		

TPA, Inc. Consultants/Engineers/Managers
Dallas, Texas

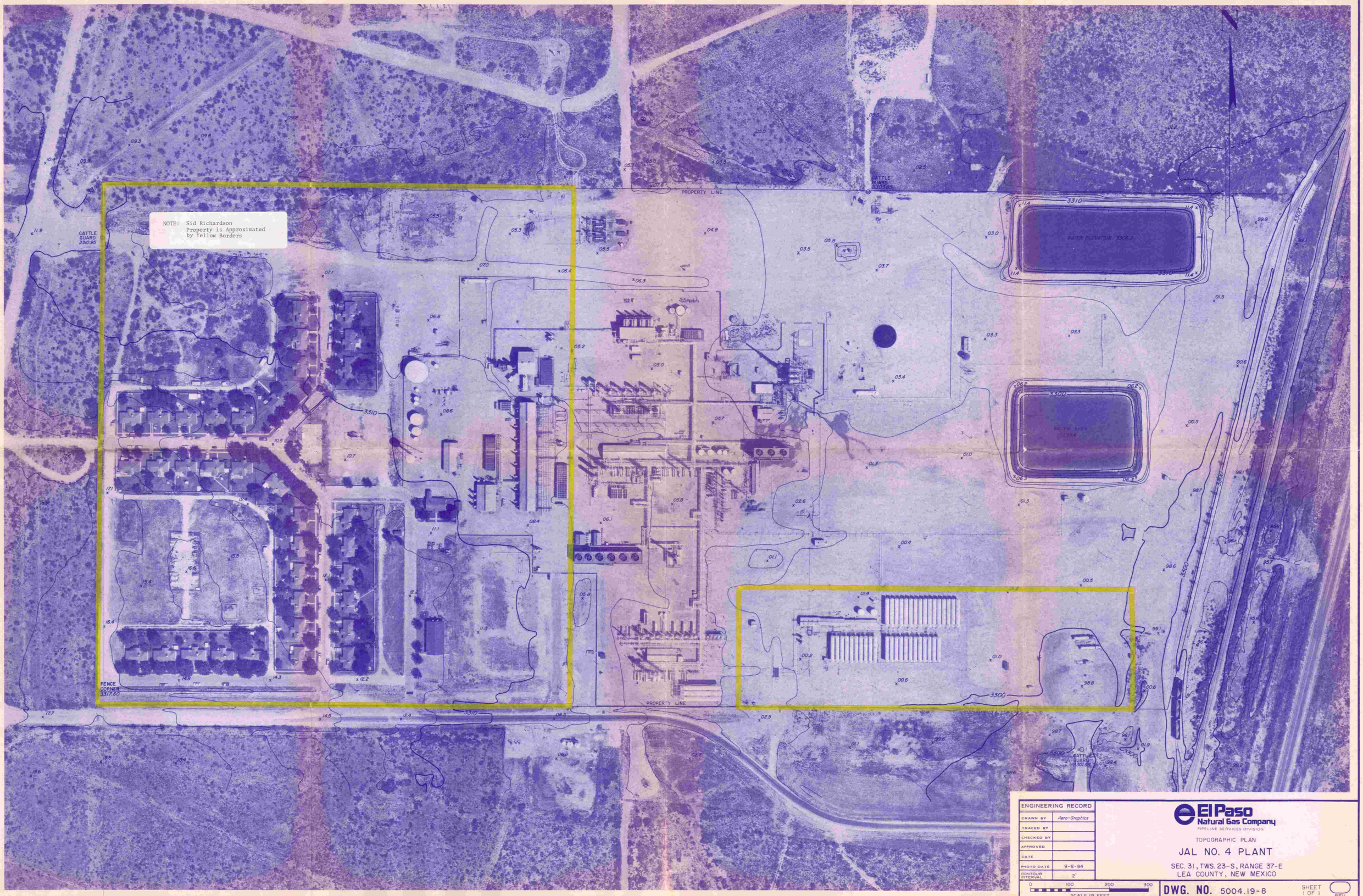
JAL 4 COMPRESSOR FACILITY
JAL, LEA CO., NEW MEXICO
DRAIN SYSTEMS

OWNER: SID RICHARDSON — JAL, LEA CO., N.M.

SCALE: NONE	FILE NAME: 1098-01	JOB No.: 1098

DRAWING NUMBER	OWNERS DRAWING NUMBER	REVISION
D-1098-01	J4-D-001	0

RECEIVED
FEB 25 1992
OIL CONS. DIV.
SANTA FE



ENGINEERING RECORD	
DRAWN BY	Aero-Graphics
TRACED BY	
CHECKED BY	
APPROVED	
DATE	
PHOTO DATE	9-8-84
CONTOUR INTERVAL	2'

0 100 200 300
SCALE IN FEET

El Paso Natural Gas Company
PIPELINE SERVICES DIVISION

TOPOGRAPHIC PLAN

JAL NO. 4 PLANT

SEC. 31, TWS. 23-S, RANGE 37-E
LEA COUNTY, NEW MEXICO

DWG. NO. 5004.19-8

SHEET 1 OF 1

REV.

Contour Lines Have Been Adjusted To Match Rectified Photo Base

REPRODUCTION BY aero-graphics

SURGE TANK (LOCATED NEAR DISPOSAL WELL)
21'-7" O.D. X 24'-0" HEIGHT
1500bbl CAPACITY
1/4" CARBON STEEL PLATE

SALT WATER DISPOSAL LINE TO WELL SDW 24

PROPERTY LINE

POND No. 19
0.05 Ac.±

POND No. 1
1.6 Ac.±

CLASSIFIER
20'-4" O.D. X 8'-0" HEIGHT
925bbl CAPACITY
1/4" CARBON STEEL PLATE W/40 MIL EPOXY COATING

OIL STORAGE TANK
12'-3" O.D. X 16'-4" HEIGHT
335bbl CAPACITY
1/4" CARBON STEEL PLATE W/60 MIL EPOXY COATING

POND No. 18
0.03 Ac.±

JAL No. 4 CLASSIFIER
18" STEEL

4" DIAMETER DISCHARGE LINE TO TRUCK FILL STAND

PLANT WASTEWATER INFLOW
20' OF 16" DIAMETER CONCRETE STEEL PIPING

POND No. 2
0.17 Ac.±

POND No. 17
0.05 Ac.±

POND No. 10
0.92 Ac.±

POND No. 11
0.87 Ac.±

CONTINGENCY POND
12,980bbl CAPACITY

POND No. 3
0.69 Ac.±

POND No. 8
0.89 Ac.±

POND No. 9
0.98 Ac.±

POND No. 4
0.18 Ac.±

POND No. 20
0.27 Ac.±

POND No. 5
0.64 Ac.±

POND No. 7
1.58 Ac.±

POND No. 15
0.16 Ac.±

POND No. 6
1.37 Ac.±

POND No. 14
0.035 Ac.±

NEW MEXICO HIWAY 18

Proposed Culvert 36" S = .010

A

B

N

31 32

6 5

—LEGEND—

A - DRAINAGE AREA PREDICTION POINT
DRAINAGE DIVIDE FOR PLANT AREA
CLASSIFIER - (JAL No. 4)
EXISTING CONTOURS TO BE REGRADED
PROPOSED CONTOURS
CULVERTS

REV. A - VMC

ON OF WASTE DISPOSAL SYSTEM ADDED (6-5-81)

JAL NO. 4 SITE GRADING PLAN

ENGINEERING RECORD	
DRAWN BY	Aero-Graphics
TRACED BY	
CHECKED BY	J. T. C.
APPROVED	F. S.
DATE	
PHOTO DATE	2-12-81
CONTOUR INTERVAL	2'

El Paso NATURAL GAS COMPANY
PIPELINE SERVICES DIVISION
EL PASO, TEXAS

PLANT AREA AND PROPOSED DRAINAGE PATTERN

JAL NO. 4 PLANT

SEC. 5,6,31,32, TWS. 23-S & 24-S, RANGE 37-E
LEA COUNTY, NEW MEXICO

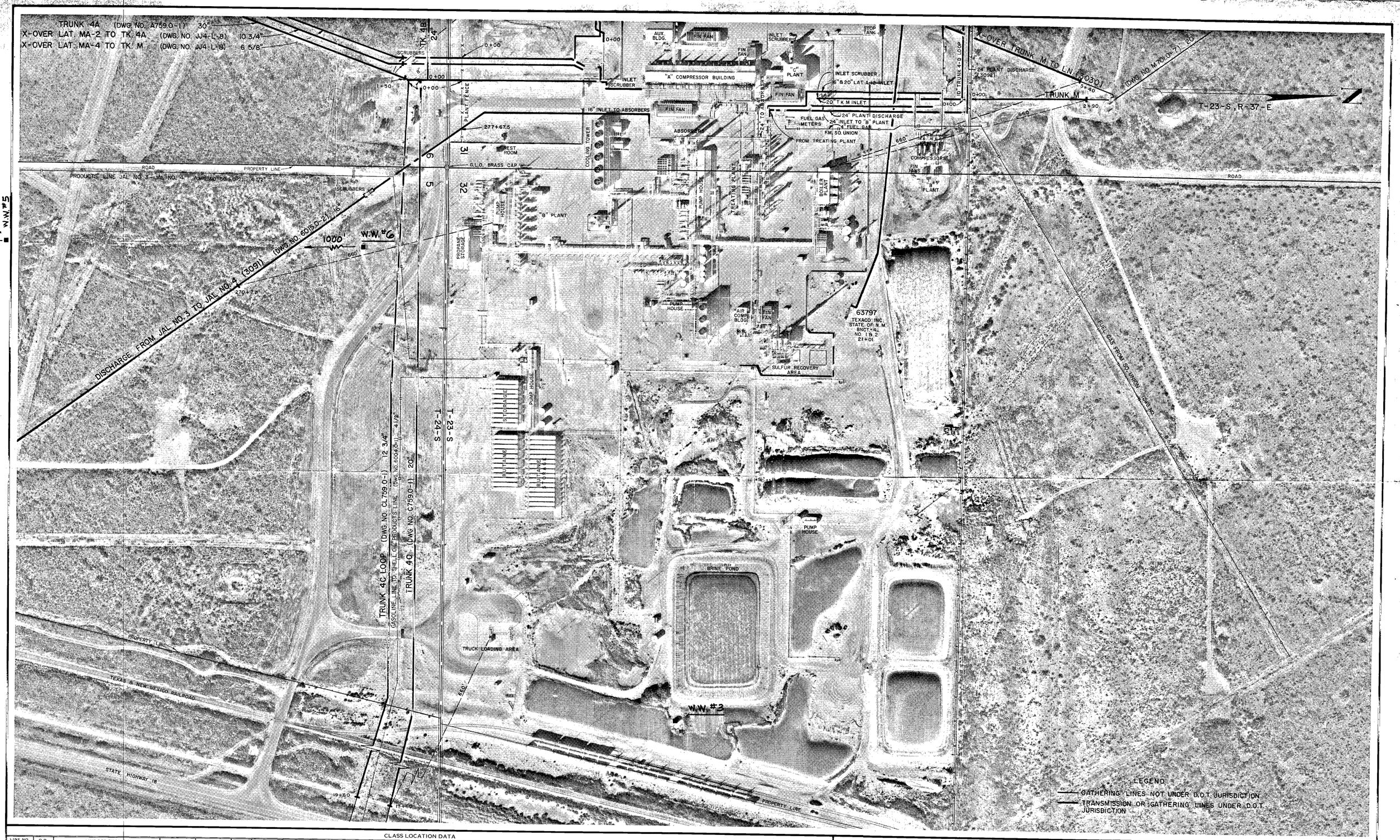
0 100 200 400
SCALE IN FEET

DWG. NO. 5004.19-1

REV.

Contour Lines Have Been Adjusted To Match Rectified Photo Base

REPRODUCTION BY aero-graphics



W.W. #4 — 1000'

W.W. #5

CLASS LOCATION DATA

LINE NO.	O.D.	LINE DESIGNATION	BEGIN	END	CL. LOC.	METER NO.
		ALL GAS PLANT PIPING			2	
M701	20"	TRUNK M	INLET SCBS.	2+90	2	
B759	4"	TEXACO INC - STATE OF N.M. BNCT 4 #1 & 2	0+00	21+01	3	63797
C759	20"	TRUNK 4C	0+00	19+60	2	
CL759	12"	TRUNK 4C LOOP	0+00	19+60	2	
3091	16"	DISCHARGE FROM JAL NO. 3 TO JAL NO. 4	270+77	INLET ABSBS.	2	
3092	24"	JAL NO. 4 PLANT DISCHARGE	TREATING PLT.	17+66	2	
	6"	X-OVER LAT. MA-4 TO TRUNK M	INLET SCBS.	1+50	3	
	6"	X-OVER LAT. MA-4 TO TRUNK M	1+50	5+80	2	
	10"	X-OVER LAT. MA-2 TO TRUNK 4A	INLET SCBS.	1+50	3	
	10"	X-OVER LAT. MA-2 TO TRUNK 4A	1+50	5+80	2	
	16" & 20"	LATERAL A-12 INLET			2	
	24"	INLET TO B PLANT			2	
	20"	X-OVER TRUNK M TO LINE 3030	0+00	5+40	2	

LINE NO.	O.D.	LINE DESIGNATION	BEGIN	END	CL. LOC.	METER NO.

LINE NO.	O.D.	LINE DESIGNATION	BEGIN	END	CL. LOC.	METER NO.

DRAFTING BY AERO-GRAPHICS, INC.
SALT LAKE CITY, UTAH

REVISIONS

NO	DATE	BY	DESCRIPTION
A	1-29-79	LD	Added Legend & Miscellaneous Revisions
B	7-13-81	LR	Added Plant Property Line

ENGINEERING RECORD

DRAWN BY	Aero-Graphics
TRACED BY	
CHECKED BY	
APROVED	R. L. G.
DATE	10-16-78
PHOTO DATE	11-4-76
PHOTO RE-CHECK	6-22-79

0 100 200 300
SCALE IN FEET

El Paso NATURAL GAS COMPANY
PIPELINE SERVICES DIVISION
EL PASO, TEXAS

PERMIAN DIVISION

D.O.T. CLASS LOCATION

JAL NO. 4 PLANT

LEA COUNTY, NEW MEXICO

DWG. NO. 5004.14-2 SHEET 2 OF 2 REV. B

REPRODUCTION BY: aero-graphics inc. 2005 SOUTH WEST TEMPLE SALT LAKE CITY, UTAH 84115

EL PASO NATURAL GAS

RECEIVED

December 18, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Fourth Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/496-5764 or Richard Sumner at 915/496-5341.

Sincerely,

Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	18520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.9	66	<0.025	0.38	72	0.062	12	2800	0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	1.0	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.8	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	28
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	1.0	78	<0.006	0.56	100	0.069	16	4300	0.010	6.1	3	1.9	2.8	830	620	2.1	280	36
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.8	2.7	3	<7.5	759	630	2.06	293	41
5/8/96	S96-0263	Monitor Well ACW #01	4130	8190	14620	8.2	2.2	<1.25	1.0	93	0.01	0.6	118	0.09	18	3070	<0.05	6.3	2.03	<1.0	<3.0	310	718	<1.25	268	54
8/13/96	S96-0381	Monitor Well ACW #01	3500	7400	12000	8.1	4.9	<0.05	1.1	110	0.019	0.68	100	0.078	8.6	2400	0.008	3.5	1.2	<1.0	<2.0	730	690	1.9	270	41
11/5/96	S96-0576	Monitor Well ACW #01	3700	7200	11000	8.1	4.4	<0.05	1.0	81	<0.007	0.59	98	0.062	11	3000	0.011	5.6	2.5	<1.0	1.3	810	610	2	250	18
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3084	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2648	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.9	270	<0.025	0.46	39	0.026	6.6	540	0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1.0	270	<0.025	0.34	40	0.02	6.9	530	0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/6/96	S96-0062*	Monitor Well ACW #05	508	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
5/8/96	S96-0258	Monitor Well ACW #05	519	2460	3650	7.2	0.42	5	0.8	187	0.01	0.2	24	<0.05	8	506	<0.05	<1.0	<1.0	<1.0	<3.0	190	515	4.5	653	35
8/13/96	S96-0385	Monitor Well ACW #05	500	2500	3400	7.3	0.7	5.4	2.0	200	<0.006	0.024	28	<0.007	6.3	520	0.033	<1.0	1.2	<1.0	<2.0	320	620	1	710	58
11/6/96	S96-0588	Monitor Well ACW #05	500	2300	3300	7.5	0.57	<0.05	1.9	180	<0.007	0.3	25	0.008	6	520	0.022	1.1	1.4	1.2	<2.0	350	580	1.2	710	27

* Analysis done by T.O.E. Lab

JAL #4 MONITOR WELL

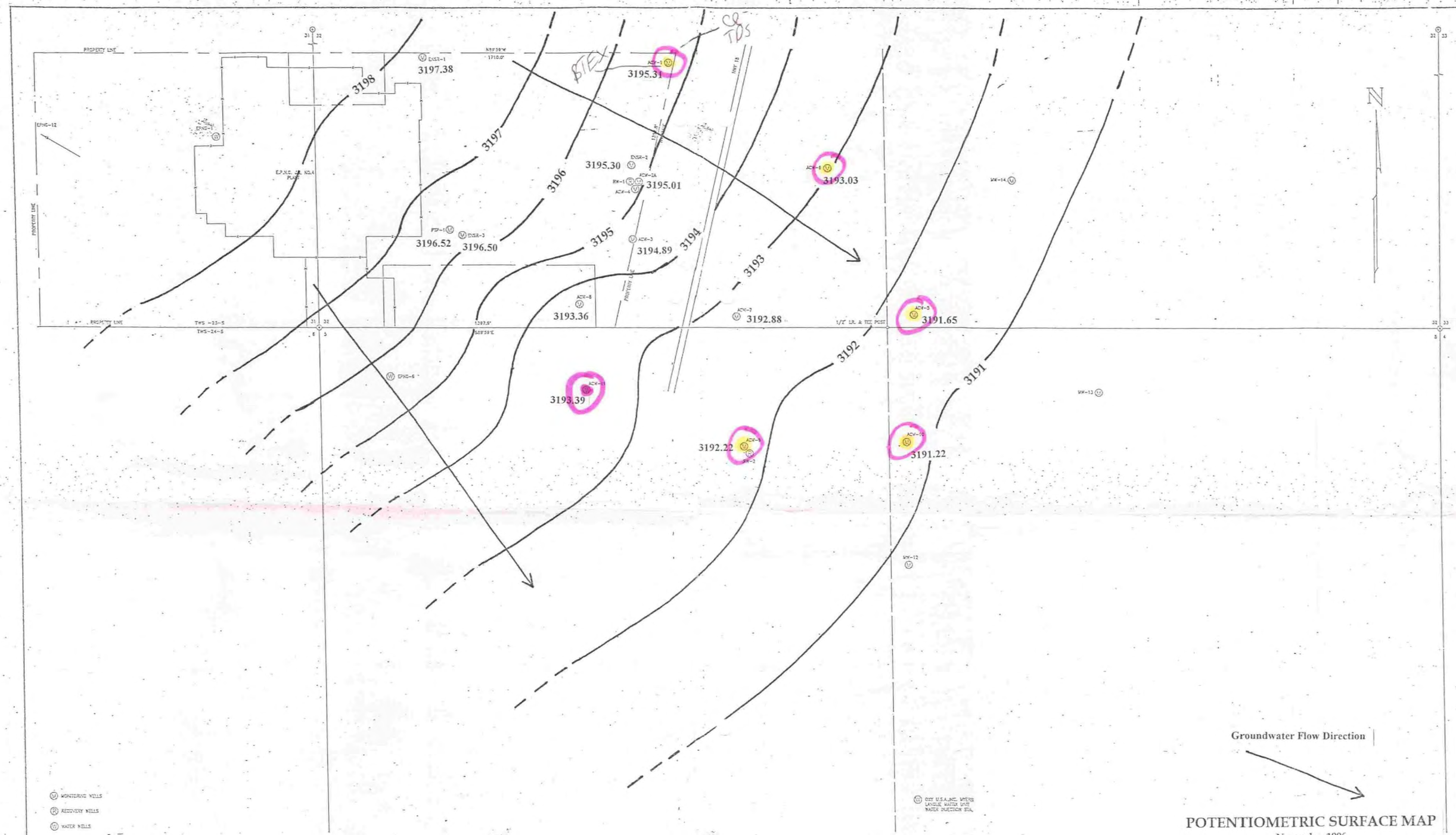
SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.9	70	<0.025	3.9	19	0.079	<5.0	2200	0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.9	42	<0.025	0.54	16	0.04	<5.0	2500	0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50
5/8/96	S96-0257	Monitor Well ACW #06	2880	6460	10620	7.7	6.4	<1.25	1.3	35	0.02	4.1	21	0.14	4	2380	<0.05	4.08	1.58	<1.0	<3.0	1396	175	<1.25	48	40
8/14/96	S96-0321	Monitor Well ACW #06	2900	7100	11000	7.9	21	<0.05	1.2	85	<0.006	4.5	23	0.13	3.4	2900	0.024	4.2	2.6	<2.0	<2.0	1400	310	1.8	88	60
11/6/96	S96-0585	Monitor Well ACW #06	3400	7700	12000	8.6	18	<0.05	1.2	98	<0.007	5.3	27	0.16	3.8	2800	0.032	4.5	1.5	<1.0	<2.0	1600	360	1.3	74	32
11/6/96	S96-0586	Monitor Well ACW #06	3600	7700	12000	8.6	18	<0.05	1.1	88	<0.007	4	22	0.13	3.6	2400	0.019	4.6	1.5	<1.0	<2.0	1600	310	1.3	62	27
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.4	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.4	770	<0.025	0.28	250	0.98	15	1000	0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.4	640	<0.025	0.19	220	0.86	14	880	0.040	<5	<10	<5	<15	240	2000	1.5	370	43
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.4	570	<0.006	0.48	180	0.71	14	810	0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4820	7450	8.8	0.38	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
5/8/96	S96-0259	Monitor Well ACW #09	2210	4210	7530	6.8	0.35	<1.25	<0.5	508	0.01	0.4	183	0.49	17	687	<0.05	<1.0	<1.0	<1.0	<3.0	209	2020	3	322	60
8/14/96	S96-0326	Monitor Well ACW #09	1200	3600	4400	7.4	1.4	0.13	0.4	490	<0.006	0.66	160	0.65	13	730	0.027	1.4	1.6	<1.0	<2.0	220	1900	1.2	180	53
11/7/96	S96-0590	Monitor Well ACW #09	1200	3100	4200	7.3	1.1	0.055	0.3	360	<0.007	0.4	110	0.44	10	510	0.029	2.3	2.2	<1.0	<2.0					

* Analysis done by T.O.E. Lab

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/26/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.3	320	<0.025	0.12	110	0.037	8	170	0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.3	280	<0.025	0.28	94	0.029	7.5	160	0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.2	280	<0.025	<0.20	95	0.034	52	150	0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.3	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
5/8/96	S96-0261	Monitor Well ACW #10	603	1290	2322	7.2	0.46	2.2	<0.5	206	<0.01	0.1	92	<0.05	8	127	<.05	1.22	<1.0	<1.0	<3.0	137	893	4.5	190	62
8/14/96	S96-0327	Monitor Well ACW #10	560	1900	2400	7.6	1.4	0.58	0.3	210	<0.006	0.14	71	0.019	7	140	0.037	<1.0	<1.0	<1.0	<2.0	170	810	0.82	160	47
11/7/96	S96-0591	Monitor Well ACW #10	610	1800	250	7.5	1.1	0.49	0.2	200	<0.007	0.22	70	0.017	7.4	150	0.025	1.2	1.5	<1.0	<2.0	170	800	0.83	170	20
6/19/93	S93-0393	Monitor Well ACW #11	9737	18870	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.3	740	<0.025	0.36	260	0.23	16	1200	0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.4	720	<0.025	0.29	270	0.2	16	980	0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.8	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.3	550	<0.025	0.17	210	0.088	16	880	0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46
5/8/96	S96-0262	Monitor Well ACW #11	3120	5080	9840	7.3	0.37	<1.25	<0.5	484	0.02	0.3	220	0.09	29	1160	<0.05	6.76	<1.0	<1.0	<3.0	111	2110	<1.25	206	50
8/13/96	S96-0383	Monitor Well ACW #11	4200	10000	12000	7.3	1.0	0.18	0.4	540	0.013	0.28	190	0.061	24	1700	0.12	7.9	2.2	<1.0	<2.0	160	2100	2	230	47
11/5/96	S96-0578	Monitor Well ACW #11	13000	25000	29	7.3	0.4	0.31	0.3	1200	<0.007	0.25	430	0.14	35	5100	0.068	32	1.7	<1.0	1.2	170	4700	2.9	560	21

* Analysis done by T.O.E. Lab


PROPERTY LINE
EXSR-1
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SITE
CL TDS
N
Groundwater Flow Direction
MONITORING WELLS
RECOVERY WELLS
WATER WELLS
POTENTIOMETRIC SURFACE MAP
November 1996
Contour Interval: 1 foot

EL PASO NATURAL GAS

December 5, 1996

Mr. John Hernandez - Area Supervisor
State Engineer Office
1900 W. Second
Roswell, NM 88201-1712

RE: Recovery Well Permit Applications
Jal No. 4 Plant
Lea County, New Mexico

Dear Mr. Hernandez:

El Paso Natural Gas Company (EPNG) is implementing ground water recovery and remediation activities at the above referenced site. EPNG requests your approval to operate two ground water recovery wells to aid in pollution control and remediation.

Enclosed is a copy of EPNGs "Project Work Plan" and "Project Work Plan Revisions" for the ground water remediation/investigation (Tab A). Also enclosed are two letters from Bill Olson of the New Mexico Oil Conservation Commission (OCD) dated January 12 and April 27, 1995, which document OCDs work plan approval (Tab B). The third and fourth enclosures are the completed "Application For Permit" for each well (Tab C and D). The fifth enclosure is a site plan map which shows the Jal No. 4 Plant, the location of EPNGs recovery wells designated RW-1 and RW-2, EPNGs monitor well network and the location of Oxy Petroleum's water injection station (Tab E).

As stated in the work plan and shown on the well completion diagrams (attached to the applications), the recovery wells were installed to a depth of approximately 180 feet below ground surface at the top of the Chinle red beds aquiclude. The recovery wells are designed to remove brine contaminated ground water from the aquifer and to prevent further brine migration. To remove the water, a submersible pump will be installed in the 10-inch diameter wells for fluid recovery. The conveyance lines for the recovered water will consist of 4-inch polyethylene lines which will convey the recovered water from RW-1 (see attached plat) to RW-2 and then convey the water from RW-2 to Oxy Petroleum's, Langlie Mattix waterflood injection station. Right of Way permits have already been obtained from the State of New Mexico, landowners, the railroad, and all other affected parties. All lines have been buried.

El Paso Natural Gas Company P.O. Box 1492 El Paso, Texas 79978-1492 Phone (915) 496-2600 Fax (915) 496-3155

The pumps will be metered and all ground water withdrawal volumes will be submitted to the State Engineer Office on a quarterly basis, per current requirements. The recovery well pump rates will not likely exceed 20 gallons per minute. As stated above, the recovered water will be utilized as additional make-up water in the waterflood project for secondary oil recovery at the Langlie Mattix field.

Upon completion of the ground water remediation project, which is anticipated to take from eight to ten years, the recovery wells will be properly plugged.

If you have any questions or require any additional data, please call me at 915-496-5764.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Enclosures

cc: Bill Olson - OCD (Santa Fe)
Jerry Sexton - OCD Hobbs District Supervisor
Wayne Price - OCD Hobbs Office

El Paso Natural Gas Company

PAYABLE AT
CITIBANK DELAWARE
A SUBSIDIARY OF CITICORP
ONE PENN'S WAY
NEW CASTLE, DE 19720

CONTROL NO
232 CBD

DATE
12/05/96

CHECK NO.
[redacted]

P.O. BOX 1492
EL PASO, TX 79978

62-20
311

VOID AFTER 1 YEAR

PAY AMOUNT
$10.00

PAY TO THE ORDER OF

STATE ENGINEER OFFICE
1900 WEST SECOND ST
ROSWELL NM 88201

John M. Bean Jr.

COPYBAN+ ANTI-FRAUD PROTECTION - PATENTS 4,210,346; 4,227,720; 4,310,180; 5,197,755

[redacted]

Detach and retain for your records

EL PASO NATURAL GAS COMPANY

REMITTANCE ADVICE

Vendor Number
013906 001

Check Date
12/05/96

Check Number
[redacted]

VOUCHER NUMBER	INVOICE NUMBER	AMOUNT		
		Invoice	Discount	Net
REFER PAYMENT INQUIRIES TO ACCOUNTS PAYABLE (915) 541-5354				
VOUCHER NO	INVOICE NO	GROSS	DISCOUNT	NET
000602112	CKREQ961202	10.00	.00	10.00
APPLICATION FOR PERMIT FILING FEE				
SUBMITTAL OF TWO PERMIT APPLICATIONS				
FOR RECOVERY WELLS RW-1 AND RW02				
	TOTALS	10.00	.00	10.00

FM SS0044 (REV. 10/94

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

June 13, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Ground Water Remediation/Investigation
EPNG Jal No. 4 Gas Plant
Lea County, New Mexico

Dear Mr. Olson:

Problems were encountered obtaining access agreements with the New Mexico Highway Department, the State of New Mexico, the Texas-New Mexico Railroad and a local landowner. As a result, the proposed field work was delayed.

All access agreements are now in place. As stated in our telephone conversation on June 10, 1996 monitor well drilling is scheduled to begin on Monday, June 17 and conclude on Friday, June 21. Monitor well installation and completion will follow the well design specified in El Paso Natural Gas Company's (EPNG) June 28, 1995 "GROUND WATER REMEDIATION/INVESTIGATION, PROJECT WORK PLAN REVISIONS, EPNG JAL. NO. 4, LEA COUNTY, NEW MEXICO". This document was approved on August 10, 1995 with the following conditions:

1. All monitor wells will be constructed as set out below:

   a. An appropriately sized gravel pack will be set around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

   b. A 2-3 foot bentonite plug will be placed above the gravel pack.

   c. The remainder of the hole will be sealed with cement containing 5% bentonite.

2. EPNG will develop each well upon completion using EPA approved procedures.

3. Ground water from the monitor wells will be sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX), major cations and anions, heavy metals and polynuclear aromatic hydrocarbons using EPA approved methods.

4. EPNG will submit a report on the investigation to the OCD by November 3, 1995. The report will contain:

   a. A description of all activities which occurred during the investigation, conclusions and recommendations.

   b. A summary of the laboratory analytic results of water quality sampling of the monitor wells.

   c. A water table elevation map using the water table elevation of the ground water in all monitor wells.

   d. A geologic log and as built well completion diagram for each well.

5. EPNG will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and or split samples.

6. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

A recovery well will be installed adjacent to ACW-4 and ACW-9, respectively. Drilling of these recovery wells is scheduled to begin on Saturday, June 22 and conclude on June 28, 1996.

As a result of the previously described problems, field work was delayed and the investigation report was not submitted by November 3, 1995, as requested. With the current drilling schedule, it is anticipated an investigation report will be submitted to OCD by August 30, 1996; approximately 60 days after completion of all monitoring well installation.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

JUL - 1 1996
OIL CONSERVATION DIVISION

June 27, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Second Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

6/24/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.4	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.4	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.4	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.4	570	<0.006	0.48	180	0.71	14	810	<0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4620	7450	6.8	0.36	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
5/8/96	S96-0259	Monitor Well ACW #09	2210	4210	7530	6.8	0.35	<1.25	<0.5	508	0.01	0.4	183	0.49	17	687	<0.05	<1.0	<1.0	<1.0	<3.0	209	2020	3	322	60
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.3	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.3	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.2	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.3	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
5/8/96	S96-0261	Monitor Well ACW #10	603	1290	2322	7.2	0.46	2.2	<0.5	206	<0.01	0.1	92	<0.05	8	127	<.05	1.22	<1.0	<1.0	<3.0	137	893	4.5	190	62
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.3	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.4	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.3	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	<0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46
5/8/96	S96-0262	Monitor Well ACW #11	3120	5080	9840	7.3	0.37	<1.25	<0.5	484	0.02	0.3	220	0.09	29	1160	<0.05	6.76	<1.0	<1.0	<3.0	111	2110	<1.25	206	50

* Analysis done by T.O.E. Lab

Jal42qr96.xls

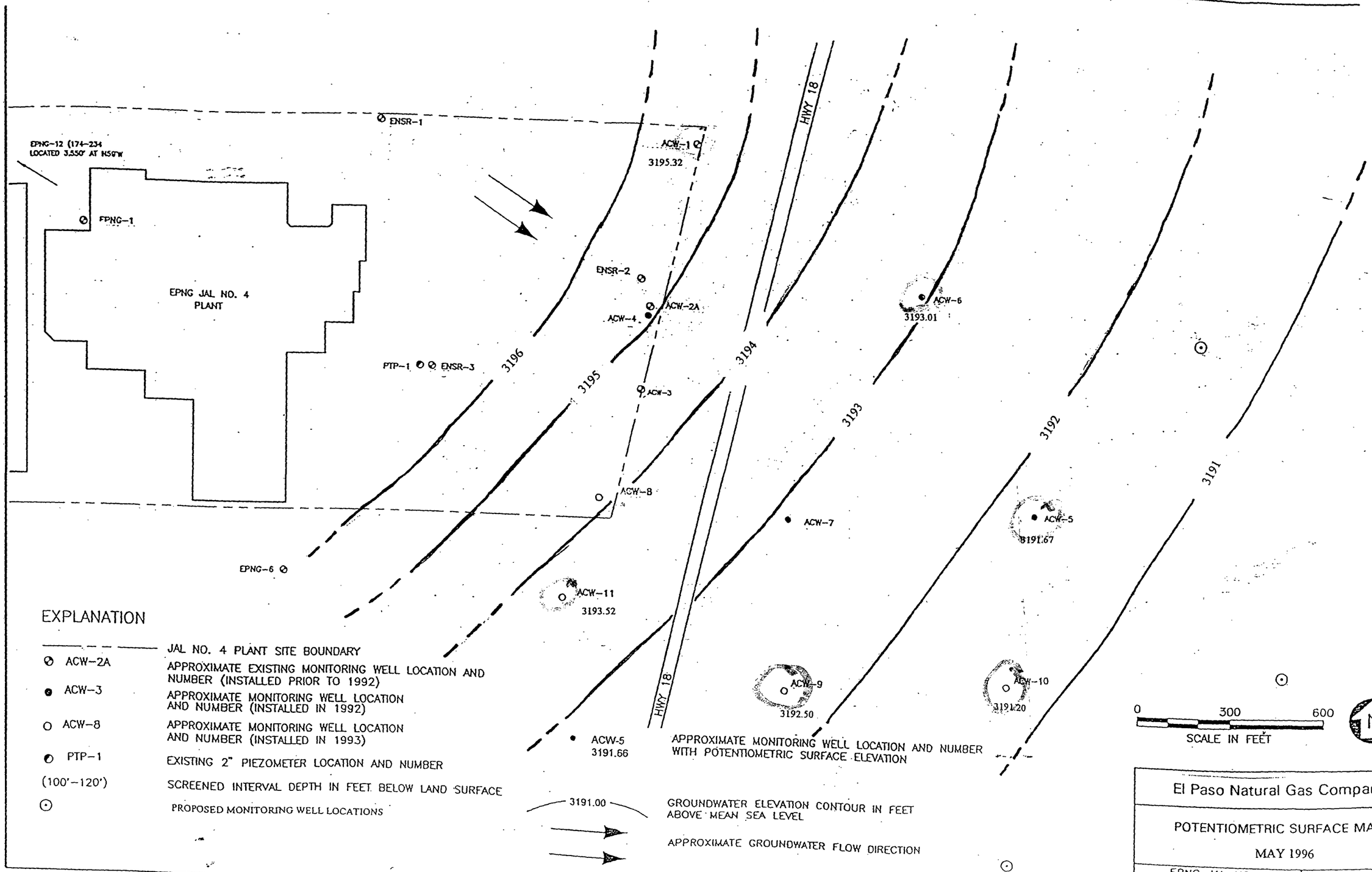
JAL #4 MONITOR WELL

6/24/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.9	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	1.0	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.8	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	1.0	78	<0.006	0.56	100	0.069	16	4300	<0.010	6.1	3	1.9	2.8	830	620	2.1	280	
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.6	2.7	3	<7.5	759	630	2.06	293	41
5/8/96	S96-0263	Monitor Well ACW #01	4130	8190	14620	8.2	2.2	<1.25	1.0	93	0.01	0.6	118	0.09	18	3070	<0.05	6.3	2.03	<1.0	<3.0	310	718	<1.25	268	54
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.9	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1.0	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/16/96	S96-0062*	Monitor Well ACW #05	506	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
5/8/96	S96-0258	Monitor Well ACW #05	519	2460	3650	7.2	0.42	5	0.8	167	0.01	0.2	24	<0.05	8	506	<0.05	<1.0	<1.0	<1.0	<3.0	190	515	4.5	653	35
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.9	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.9	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	<0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50
5/8/96	S96-0257	Monitor Well ACW #06	2880	6460	10620	7.7	6.4	<1.25	1.3	35	0.02	4.1	21	0.14	4	2380	<0.05	4.08	1.58	<1.0	<3.0	1396	175	<1.25	48	40

* Analysis done by T.O.E. Lab

Jal42qr96.xls



EXPLANATION

— — — —	JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A	APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3	APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8	APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1	EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120')	SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
⊙	PROPOSED MONITORING WELL LOCATIONS
ACW-5 3191.66	APPROXIMATE MONITORING WELL LOCATION AND NUMBER WITH POTENTIOMETRIC SURFACE ELEVATION
3191.00	GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
→	APPROXIMATE GROUNDWATER FLOW DIRECTION

El Paso Natural Gas Company

POTENTIOMETRIC SURFACE MAP

MAY 1996

EPNG JAL NO. 4
JAL, NEW MEXICO
10191

Contour Interval
One Foot

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

OIL CONSERVATION DIVISION
'96 MAR 1 8 52

March 26, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
First Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

3/26/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
7/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
6/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.88	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	0.95	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.82	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	28
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	0.99	78	<0.006	0.56	100	0.069	16	4300	<0.010	6.1	3	1.9	2.8	830	620	2.1	280	36
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.6	2.7	3	<7.5	759	630	2.06	293	41
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.94	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/16/96	S96-0062*	Monitor Well ACW #05	506	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
8/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
5/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.94	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.85	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	<0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50

* Analysis done by T.O.E. Lab

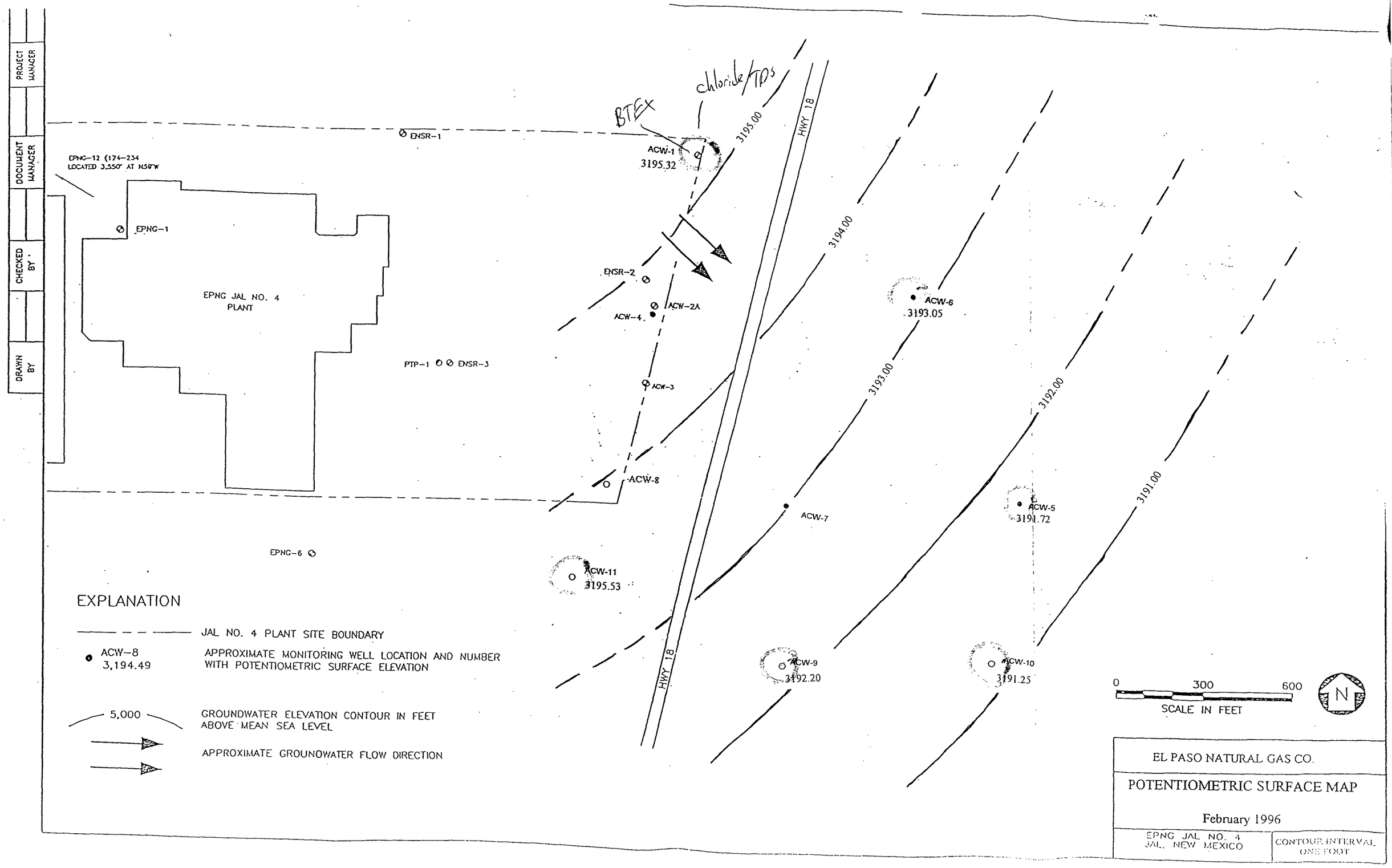
JAL #4 MONITOR WELL

3/26/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.41	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	8200	9100	7.0	<1.0	<2.0	0.44	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.39	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.35	570	<0.006	0.48	180	0.71	14	810	<0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4620	7450	6.8	0.36	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.28	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.25	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.24	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.26	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
5/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.32	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.35	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.29	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	<0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46

* Analysis done by T.O.E. Lab

Jal4qrt96.xls


PROJECT MANAGER
DOCUMENT MANAGER
CHECKED BY
DRAWN BY
EPNG-12 (174-234
LOCATED 3,550' AT N58°W
EPNG-1
EPNG JAL NO. 4
PLANT
ENSR-1
ENSR-2
ENSR-3
PTP-1
EPNG-6
ACW-1
3195.32
BTEX
chloride/TDS
ACW-2A
ACW-4
ACW-3
ACW-8
ACW-7
ACW-11
3195.53
ACW-9
3192.20
ACW-10
3191.25
ACW-5
3191.72
ACW-6
3193.05
3195.00
3194.00
3193.00
3192.00
3191.00
HWY 18
HWY 18
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-8
3,194.49
APPROXIMATE MONITORING WELL LOCATION AND NUMBER WITH POTENTIOMETRIC SURFACE ELEVATION
5,000
GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
600
SCALE IN FEET
N
EL PASO NATURAL GAS CO.
POTENTIOMETRIC SURFACE MAP
February 1996
EPNG JAL NO. 4
JAL, NEW MEXICO
CONTOUR INTERVAL
ONE FOOT

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

January 19, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RECEIVED
JAN 22 1996
Environmental Bureau
Oil Conservation Division

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Fourth Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

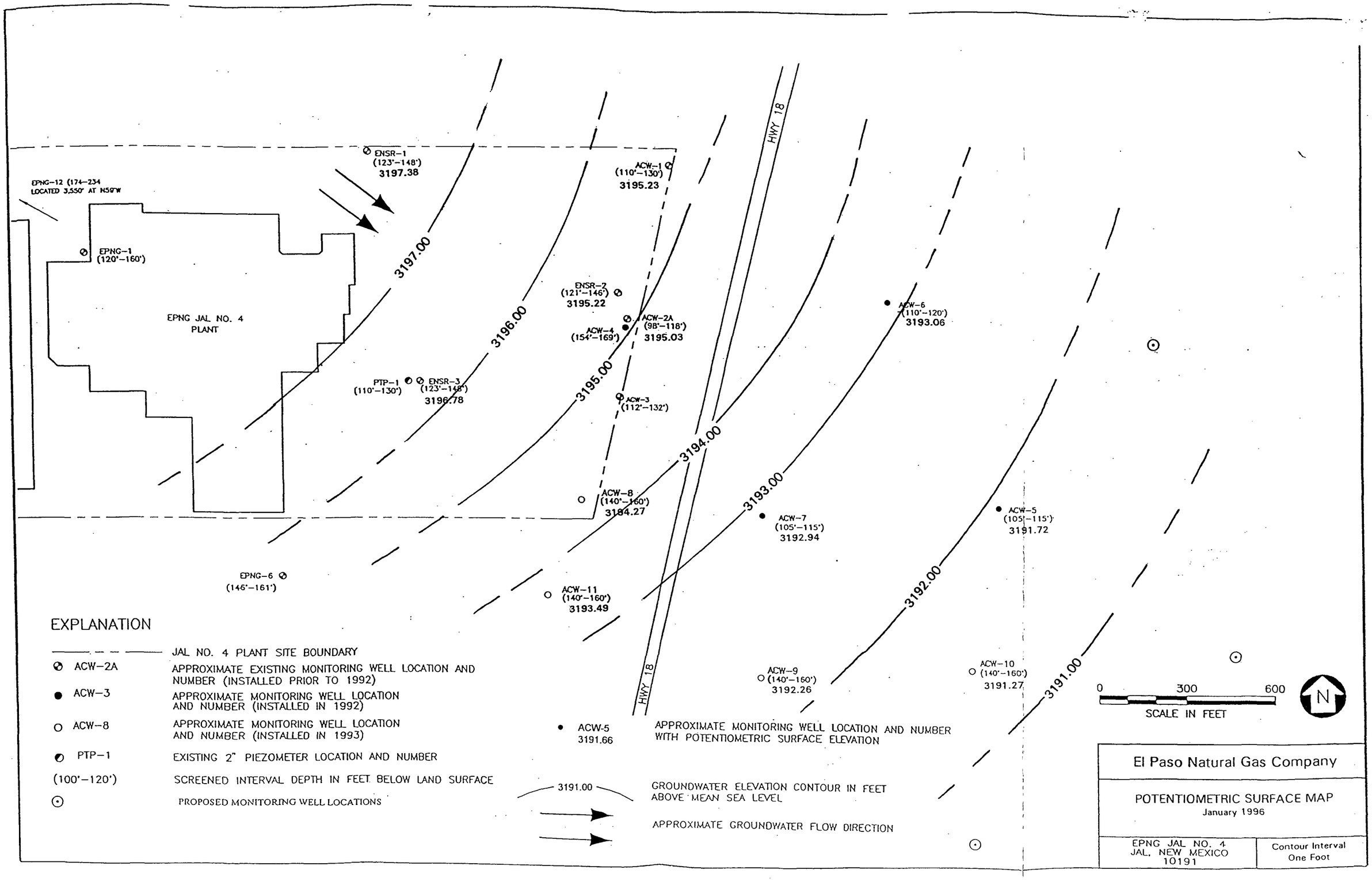
cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.88	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	0.95	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.82	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	28
10/25/95	S95-0659	Monitor Well ACW #01	3600	6170	8860	8.2	18	<2.0	0.76	97	<0.025	0.74	94	0.097	8.6	1800	<0.020	7	3	2	4	670	578	1.51	240	16.6
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.94	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	38	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
10/25/95	S95-0674	Monitor Well ACW #05	520	1840	3140	7.2	<1.0	3.7	1.1	260	<0.025	0.14	38	<0.015	7.3	530	<0.020	<5	<10	<5	<15	321	824	1.04	860	31.1
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6658	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.94	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.85	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
10/26/95	S95-0678	Monitor Well ACW #06	3200	7070	9660	8.4	27	<20	1	89	<0.025	4.4	22	0.11	5.2	2200	0.025	8	3	<1	<3	1450	227	1.23	130	28.8

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.41	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.44	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.39	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
10/25/95	S95-0669	Monitor Well ACW #09	3500	5110	8890	6.6	<1.0	<2.0	0.4	670	<0.025	0.33	210	0.83	13	890	<0.020	<1	<2	<1	<3	336	2930	1.72	390	25.8
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2680																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.28	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.25	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.24	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
10/25/95	S95-0672	Monitor Well ACW #10	960	2090	2710	7.1	<1	<2	0.24	250	<0.025	0.2	87	0.04	6.2	130	<0.020	<5	<10	<5	<15	199	1320	2.48	240	21.5
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.32	740	<0.025	0.38	260	0.23	18	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.35	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.29	550	<0.025	0.17	210	0.088	18	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
10/25/95	S95-0665	Monitor Well ACW #11	3000	5320	7770	7.0	<1.0	<2.0	0.32	630	<0.025	0.3	220	0.15	17	1100	<0.020	8	<2	<1	<3	242	2180	1.47	220	21.8


EPNG-12 (174-234
LOCATED 3,550' AT N59°W
EPNG-1
(120'-160')
EPNG JAL NO. 4
PLANT
ENSR-1
(123'-148')
3197.38
ACW-1
(110'-130')
3195.23
HWY 18
3197.00
3196.00
3195.00
3194.00
3193.00
3192.00
3191.00
ENSR-2
(121'-146')
3195.22
ACW-2A
(98'-118')
3195.03
ACW-4
(154'-169')
ACW-6
(110'-120')
3193.06
PTP-1
(110'-130')
ENSR-3
(123'-148')
3196.78
ACW-3
(112'-132')
ACW-8
(140'-160')
3194.27
ACW-7
(105'-115')
3192.94
ACW-5
(105'-115')
3191.72
EPNG-6
(146'-161')
ACW-11
(140'-160')
3193.49
ACW-9
(140'-160')
3192.26
ACW-10
(140'-160')
3191.27
ACW-5
3191.66
0
300
600
SCALE IN FEET
N
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A
APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1
EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120')
SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
PROPOSED MONITORING WELL LOCATIONS
APPROXIMATE MONITORING WELL LOCATION AND NUMBER WITH POTENTIOMETRIC SURFACE ELEVATION
3191.00
GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
El Paso Natural Gas Company
POTENTIOMETRIC SURFACE MAP
January 1996
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
Contour Interval
One Foot

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

June 28, 1995

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Ground Water Remediation/Investigation
Project Work Plan Revisions
EPNG Jal No. 4
Lea County, New Mexico

Dear Mr. Olson:

A project work plan was submitted for your review on February 1995. In a letter dated April 27, NMOCD requested a revised work plan be submitted by July 1, 1995.

The following work plan revisions were mutually agreed to during a meeting held in NMOCD's office on June 1.

1) Three additional monitoring wells will be installed. The wells will be approximately 170 feet deep with 20 feet of screen. The attached map identifies the approximate new well locations.

2) The previously proposed well cluster will not be installed.

3) Clean up standards will be:

TDS	1000 ppm
Chloride	250 ppm

4) The NMOCD Santa Fe office will be notified at least one week in advance of all scheduled sampling, drilling, or pumping activities.

5) Supply wells will be resampled.

If you have any questions or need additional information, please contact me at (915) 541-3242 or Tom Martinez at (915) 686-3226.

Sincerely,

Gerry Garibay

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

PROJECT WORK PLAN

JAL No. 4 FACILITY
LOCATED
NEAR JAL, NEW MEXICO

February 1995

EL PASO NATURAL GAS COMPANY
P.O. Box 1492
El Paso, Texas 79978

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PROJECT WORK PLAN
Jal No. 4 Facility Located Near Jal, New Mexico

1.0 INTRODUCTION

El Paso Natural Gas Company (EPNG) hereby submits this work plan to the New Mexico Oil Conservation Division (OCD) for the groundwater extraction, investigation, and monitoring project at the Jal No. 4 Plant located approximately 10 miles north of Jal, New Mexico.

In 1989, EPNG detected a leak in the liner of a water-storage pond associated with the Jal No. 4 facility. The release consisted of high salinity water (brine) produced by the facility. At the request of the OCD, EPNG initiated a subsurface investigation of the leak in 1989. In response to this request, EPNG hired K.W. Brown & Associates, Inc. to perform a two-phased hydrogeologic study of the release. Based upon the results of these studies, a potential for off-site contamination was established; therefore, the OCD requested that EPNG further evaluate the potential vertical and horizontal extent of the contaminant plume. EPNG contracted Burlington Environmental Inc. (Burlington) to further evaluate and remediate the contaminant plume.

The five reports which have been prepared since the leak was discovered are:

- Expanded Hydrogeology Study for the El Paso Natural Gas Company Jal 4 Facility (K.W. Brown & Associates, Inc., 1990);
- Expanded Hydrogeology Study for the El Paso Natural Gas Company Jal 4 Facility: Phase II (K.W. Brown & Associates, Inc., 1991);
- Terrain Conductivity Survey Report (Burlington Environmental Inc., 1992);
- Phase III Groundwater Study EPNG Jal No. 4 Plant (Burlington Environmental Inc., 1992); and
- Phase IV Groundwater Study EPNG Jal No. 4 Plant (Burlington Environmental Inc., 1993).

According to K. W. Brown (1990), the principle water-bearing unit at the site is the Tertiary Ogallala Formation. The Ogallala unconformably overlies water-bearing red-bed sediments of the Dockum Group of the Triassic Chinle Formation. Groundwater at the site is unconfined. Locally, the saturated thickness of the Ogallala is approximately 60 feet and the potentiometric surface ranges from approximately 100 feet to 110 feet below surface. Based on January 1993 data, the groundwater gradient is approximately 0.0025 ft/ft with a southeasterly flow direction.

In a January 12, 1995, letter, the OCD requested that EPNG prepare a work plan to initiate recovery of contaminated groundwater as soon as possible, to install two additional monitoring wells, and to initiate quarterly groundwater quality monitoring at the site.

2.0 WORK PLAN

EPNG proposes the following work plan.

2.1 Project Set-up

Work schedules and coordination between Christie Gas, EPNG, and Burlington will be determined by EPNG. Burlington will be the contractor performing the field work and Scarborough Drilling has been subcontracted to install the monitoring wells and groundwater pumping equipment.

2.2 Site Work

Field work for this project will include installation of a groundwater extraction and injection system, monitoring well installation, and groundwater sampling. Other tasks include chemical analyses, design of the groundwater extraction and injection system, evaluation of the data gathered, and reporting of the results.

2.2.1 Initial Recovery of Contaminated Groundwater

Groundwater recovery will begin from Monitoring Well ACW-4 using a 3/4 horsepower submersible pump capable of pumping up to 10 gallons per minute. The water will be disposed of through a permitted injection well located approximately 600 feet north of Monitoring Well ENSR-1. The system will extract groundwater from ACW-4 and transport the water to the holding tank for the injection well, SWD Well No. 1. The system will include high-level shut-off controls at the holding tank to safeguard against overfilling the tank.

After the latest groundwater sampling data has been reviewed, an additional downgradient perimeter well will also be selected for groundwater recovery. This well will be selected based on chloride content and location on the leading edge of the plume.

2.2.2 Installation of Downgradient Monitoring Wells

Burlington will supervise the installation of two new monitoring wells using mud rotary methods southeast of existing monitoring wells ACW-10 and ACW-5. The placement of the wells is based on recent sample data obtained by EPNG, groundwater elevations, and groundwater gradient. Based on these factors, Burlington estimates that the proposed well locations will be outside of the contaminant plume.

To assess the vertical distribution of contamination, one well will be designed and installed to intercept the top of the saturated zone, with 15 to 20 feet of screen submerged. The second well will be designed and installed to collect groundwater samples at the red bed-Ogallala aquifer contact. This monitoring well will be installed at the red bed-Ogallala contact and screened 10 feet into the Ogallala.

Both wells will be constructed of 4-inch-diameter, Schedule 40 PVC with 0.010-inch slotted screen. The screened interval will be packed with 10/20 silica sand to 3 feet above the top of the screen. A 2-foot-thick bentonite seal will be placed above the

sand pack and the remaining annulus will be grouted to the surface with a cement-bentonite slurry. The wells will be completed with a 3 foot by 3 foot cement pad and lockable above-grade protection.

Following installation, the wells will be purged of a minimum of five casing volumes of groundwater and the water will be monitored during purging for temperature, pH, and conductivity until stable prior to sampling the groundwater. Samples will be obtained using a 2-inch submersible pump in the screened interval or disposable polyethylene bailers.

Target analytes for laboratory analysis include benzene, toluene, ethylbenzene, and xylenes by United States Environmental Protection Agency (USEPA) Method 8020, major cations and anions including total dissolved solids (TDS), and conductivity.

2.2.3 Groundwater Monitoring Program

Based on the January 12, 1995, letter from the OCD, groundwater samples will be collected on a quarterly basis from monitoring wells ACW-5, ACW-6, ACW-9, ACW-10, and the two new downgradient monitoring wells. The water samples will be analyzed for BTEX and major cations and anions using appropriate EPA-approved methods. In conjunction with quarterly groundwater sampling, groundwater elevations will be taken at all monitoring well locations.

2.3 Project Reporting

EPNG will submit quarterly reports to the OCD on April 1, July 1, October 1, and January 1 of each year. Each quarterly report will include the following:

- a table summarizing the present and past analytical results from the wells sampled during the quarter;
- a table showing past and present groundwater elevations for all the wells on the site; and
- a potentiometric surface map showing groundwater elevations and hydraulic gradient.

After two consecutive quarters of groundwater extraction, an evaluation of the remediation activities will be presented. The evaluation will include pump flow rates, estimates of total fluids pumped, groundwater monitoring data, and remediation progress.

It should be noted that first-quarter groundwater sampling was completed in January 1995 and will be incorporated in the first report due on April 1, 1995.

3.0 QUALITY ASSURANCE/QUALITY CONTROL

3.1 Collection of Samples

EPNG or its contractor will follow the sampling protocols and procedures as outlined in United States Environmental Protection Agency (USEPA) Test Methods for Evaluating Solid Waste (SW-846). Quality Assurance/Quality Control (QA/QC) procedures will be maintained so that the water samples collected and analyzed provide accurate and reliable information. QA/QC procedures for the project will include the use of the following items to prevent cross contamination between the samples:

- a decontaminated submersible pump for each sampling location purged;
- disposable latex gloves when collecting and handling the groundwater samples; and
- disposable polyethylene bailers or a decontaminated submersible pump when collecting the groundwater samples.

Field QA/QC procedures will consist of collecting a duplicate sample and an equipment rinsate blank at a frequency of 5 percent of the samples collected in the field or one of each per sampling event. In addition, a trip blank will be analyzed for BTEX.

3.2 Sample Identification and Control

All samples will be identified by a unique numbering system. The sample number will be referenced to the unique monitoring well name.

Sample Labeling

A sample identification code will be used to identify each sample on the chain-of-custody form. The sampler is responsible for verifying that each sample is put in the appropriate sample container. At the time of sampling, this person must fill in the time sampled, the date sampled, sign and complete the sample labels, and affix to the container jar. The label will then be covered by clear tape to protect the label.

Sample Control

Strict chain-of-custody procedures will be followed. Sample containers and coolers for shipping, supplied by the laboratory, will be used to store all samples. The samples will be under the direct observation of EPNG or its contractor's personnel at all times or secured with custody seals to detect tampering. All samples will be preserved on ice or blue ice packs immediately after collection. The water samples will be shipped directly from the field to the laboratory accompanied by the chain-of-custody forms.

3.3 Analytical Methods

The samples will be analyzed for the following constituents:

- benzene, toluene, ethylbenzene, and total xylenes (USEPA Method 8020);
- inorganic chloride;
- total dissolved solids (TDS);
- electrical conductivity;
- sulfate;
- pH;
- potassium;
- sodium;
- calcium;
- hardness ;
- alkalinity; and
- magnesium.

3.4 Cross-Contamination Controls

All drilling and sampling tools will be decontaminated before and after each use to prevent cross-contamination. The decontamination procedure for sampling equipment will consist of cleaning with a brush and Alconox™ solution followed by a potable water rinse and a distilled-water rinse. Drilling equipment will be steam cleaned. All equipment will be decontaminated prior to use and before removal from each location. Decontamination water and drill cuttings will be disposed of on-site.

3.5 Documentation of Sampling Activities

All information pertinent to field work will be recorded in a field logbook during performance of that activity. The field logbook will be a bound book that has consecutively numbered pages. Information pertinent to the work performed will be recorded in the field logbook and on field forms for sampling events and daily activities. Entries in the field logbook will contain three basic categories of information including, but not limited to:

- site activities;
- photo/survey data; and
- sampling data.

Site activity entries will be completed daily to record all relevant site investigation information. The photograph/survey and sampling logs will be completed on an "as performed" basis.

The field logbook will be kept throughout the field sampling operations to document relevant information concerning sample generation, preparation and field data. All sampling activities and data will be recorded on specified forms.

A record of each sample collected will be kept on a chain-of-custody form. The chain-of-custody form will provide an accurate written record which can be used to trace the custody of samples from the time of collection through data analysis and reporting. The sampler will complete a chain-of-custody form for samples collected each day. The following will be specified for each sample:

- sample number;
- sample date;
- sample time;
- sampler's name;
- preservatives (if applicable);
- analysis requested; and
- comments.

Field documentation will include well installation reports, groundwater sampling forms, well purging and development forms, photographs, lithologic logs, field logbook, chain-of-custody forms, and the quarterly groundwater sampling reports. The Project Manager will submit a report to EPNG following completion of each field work phase.

4.0 HEALTH AND SAFETY PLAN

The existing site-specific Health and Safety Plan will be used for this project. This plan was prepared in compliance with 29 CFR 1910 and provides for the protection of personnel in the field. Prior to initiating field work each morning, there will be a "tailgate" safety meeting to discuss safety issues. All personnel involved with the field operations will attend.

File: JAL #4 - Waste Water
File: 3004 (GPS)

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

OIL CONSERVATION DIVISION
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

New Mexico DRUG FREE It's a State of Mind!

January 12, 1995

JAN 16 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-200

Mr. Thomas D. Hutchins
Environmental Compliance Engineering
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

RE: PHASE IV GROUND WATER CONTAMINATION STUDY
EPNG JAL NO. 4 GAS PLANT

Dear Mr. Hutchins:

The New Mexico Oil Conservation Division (OCD) has completed a review of El Paso Natural Gas Company's (EPNG) November 15, 1994 "PHASE iv GROUND WATER CONTAMINATION STUDY, EPNG JAL NO.4, LEA COUNTY, NEW MEXICO" and June 20, 1994 "JAL NO. 4 PLANT, PHASE IV GROUNDWATER STUDY, EL PASO NATURAL GAS COMPANY". These documents contain the results of EPNG's recent offsite investigations of the extent of ground water contamination related to the operation of the Jal No. 4 Gas Plant and a conceptual remediation plan.

The OCD approves of the investigative actions taken to date and the remedial action concepts as presented in the above referenced documents. However, the OCD would like to express their concern that monitor wells ACW-8, ACW-9, ACW-10 and ACW-11 do not accurately represent ground water conditions at the base of the aquifer. These wells were to be located at the aquifer/redbed contact to determine the downgradient limit of the high density saline plume at the base of the aquifer. Unfortunately these wells were constructed with well screens 10 feet above this contact. Consequently, the OCD defers comment on the usefulness of these wells for monitoring basal aquifer conditions.

In order to implement the conceptual remediation plan, the OCD requests that EPNG submit the following information to the OCD, by February 10, 1995, for approval:

A. Work Plans

1. A detailed remedial action work plan to initiate recovery of contaminated ground water as soon as possible.

2. A work plan for determining the full extent of contamination related to EPNG's activities. Please be aware that the OCD's review of the April 1994 ground water sampling data shows that all of the downgradient monitoring wells now contain contaminants in excess of New Mexico Water Quality Control Commission (WQCC) ground water standards

B. **Ground Water Quality Monitoring**

Until additional downgradient monitoring wells are installed, OCD requires that EPNG perform ground water monitoring as follows:

1. Ground water samples will be taken from monitor wells ACW-5, ACW-6, ACW-9, ACW-10, on a quarterly basis. The water from these wells will be analyzed for benzene, toluene, ethylbenzene, xylene (BTEX) and major cations and anions using EPA approved methods.

2. Quarterly reports will be submitted to the OCD on April 1, July 1, October 1 and January 1 of each year. The quarterly reports will contain:

   a. A summary of the laboratory analytic results of water quality sampling of monitor wells from the quarter. The data from each monitoring point will be presented in tabular form for each well and will list past and present sampling results.

   b. A water table elevation map showing the quarterly elevation of the water table in all monitoring wells and the direction of the hydraulic gradient.

The OCD request that EPNG notify the OCD Santa Fe Office at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples. In addition, please submit all original documents to the OCD Santa Fe Office with copies provided to the OCD Hobbs Office.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs Office

J #4-5004-Ground water

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 27, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-247

Mr. Thomas D. Hutchins
Environmental Compliance Engineering
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

RE: GROUND WATER REMEDIATION/INVESTIGATION
JAL NO. 4 GAS PLANT
LEA COUNTY, NEW MEXICO

Dear Mr. Hutchins:

The New Mexico Oil Conservation Division (OCD) has completed a review of El Paso Natural Gas Company's (EPNG) February 1995 "PROJECT WORK PLAN, JAL NO.4 FACILITY LOCATED NEAR JAL, NEW MEXICO". This document contains EPNG's work plan for remediation of contaminated ground water related to EPNG's operation of the Jal No. 4 Gas Plant. The document also contains a work plan for additional definition of the extent of ground water contamination at the site.

The above referenced work plan is approved with the following conditions:

1. If underground piping is to be used to convey pumped ground water to the injection well, the piping will be pressure tested to 3 psi above operating pressure prior to operation and the test results will be submitted to the OCD.

2. Prior to implementing the additional monitor well installation plan, EPNG will submit to the OCD by July 1, 1995 a revised work plan. The revised work plan will contain a map showing the proposed monitoring well locations. In addition to the proposed nested monitoring wells downgradient of ACW-5 and ACW-10, the revised work plan will also include a plan for installation of additional monitoring wells to determine the lateral extent of contamination.

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ENVIRONMENTAL AFFAIRS

3. The quarterly ground water sampling program will also include ground water sampling of monitor wells ACW-1 and ACW -11.

4. The quarterly reports will include the total volume of fluid pumped from recovery well ACW-4 during the quarter and the total volume pumped to date.

5. EPNG will notify the OCD at least one week in advance of all major scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.

6. All original documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not limit EPNG to the work proposed if contamination exists which is beyond the scope of the work plan or, if the activities fail to adequately remediate contamination related to EPNG's activities. In addition, OCD approval does not relieve EPNG of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

Will C. Olson

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District Office

Revised August 1967

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT

To Appropriate the Underground Waters of the State of New Mexico

Date Received _____ File No. _____

1. Name of applicant El Paso Natural Gas Corp.
   Mailing address P. O. Box 1492
   City and State El Paso, Texas, 79978
2. Source of water supply Shallow Water Aquifer, located in Lea County Basin
   (artesian or shallow water aquifer) (name of underground basin)
3. The well is to be located in the ____ ¼ SE ¼ SW ¼, Section 32 Township 23S
   Range 37E N.M.P.M., or Tract No. ____ of Map No. ____ of the _____ District,
   on land owned by Christie Gas Corporation, 901 S. Mopac, Ste 515 Austin, Tx 78746
4. Description of well: name of driller Scarborough Drilling, LaMesa, Tx;
   Outside Diameter of casing 10" inches; Approximate depth to be drilled 180' feet;
5. Quantity of water to be appropriated and beneficially used 35 acre feet,
   (consumptive use, diversion)
   for Groundwater recovery for contaminant plume recovery purposes.
6. Acreage to be irrigated or place of use 35 acres.

Subdivision	Section	Township	Range	Acres	Owner

7. Additional statements or explanations The proposed recovery well will be used for the purpose of groundwater recovery and plume containment. The recovery well pump rate is anticipated to be approximately 15 gpm. The recovered water will be conveyed via buried 4-inch polyethylene line to the Oxy Petroleum, Langlie-Mattix waterflood injection station where it will be used as additional make-up water for their secondary oil recovery operations.

I, Richard A. Sumner, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

ROSA M. THIBODEAU NOTARY PUBLIC STATE OF TEXAS EXPIRES 01-31-98

EPNG, Permittee,

By: Richard A. Sumner.

Subscribed and sworn to before me this 5th day of December, A.D., 19 96.

My commission expires 1-31-98 Rosa M. Thibodeau
Notary Public

Number of this permit _____

ACTION OF STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the detriment of any others having existing rights; further provided that all rules and regulations of the State Engineer pertaining to the drilling of _____ wells be complied with; and further subject to the following conditions: _____

Proof of completion of well shall be filed on or before _____, 19_____

Proof of application of water to beneficial use shall be filed on or before _____, 19 _____

Witness my hand and seal this _____ day of _____, A.D., 19_____.

S. E. Reynolds, State Engineer

By: _____.

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of $5.00. Each of triplicate copies must be properly signed and attested.

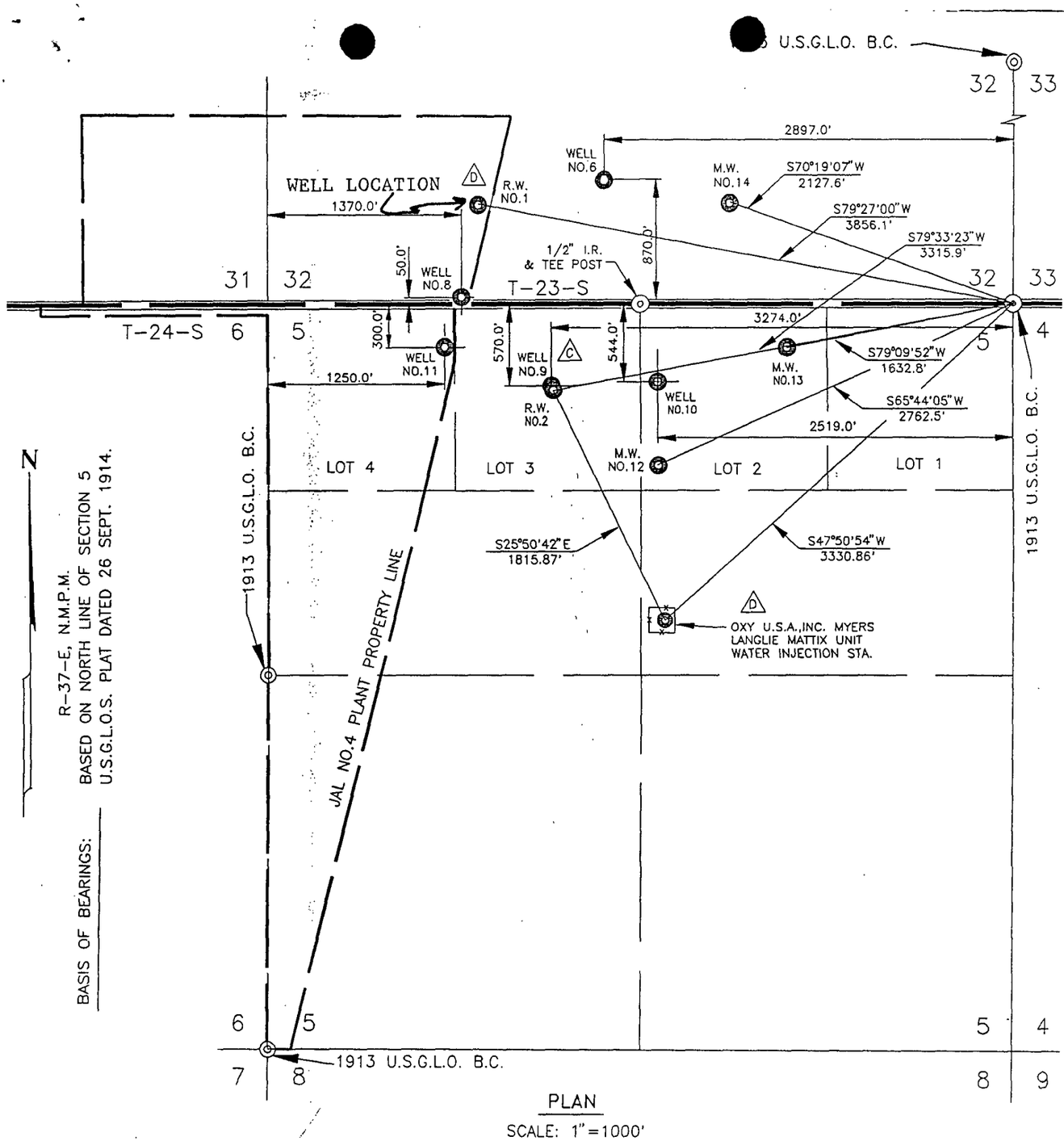
A separate application for permit must be filed for each well used.

Secs. 1–4—Fill out all blanks fully and accurately.

Sec. 5—Irrigation use shall be stated in acre feet of water per acre per annum to be applied on the land. If for municipal or other purposes, state total quantity in acre feet to be used annually.

Sec. 6—Describe only the lands to be irrigated or where water will be used. If on unsurveyed lands describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily located natural object.

Sec. 7—If lands are irrigated from any other source, explain in this section. Give any other data necessary to fully describe water right sought.



PLAN

SCALE: 1"=1000'

OWNERSHIP

SUBDIVISION	OWNER	LESSEE	RODS
ALL SECTION 5 (LESS AND EXCEPT JAL 4 PLANT TRACT)	JIMMIE J. DOOM, ET UX REBECCA J.	JIMMIE J. DOOM, ET UX REBECCA J.	
ALL SECTION 32 (LESS AND EXCEPT JAL 4 PLANT TRACT)	STATE OF NEW MEXICO	JIMMIE J. DOOM, ET UX REBECCA J.	

EF. DWG.:5004.1-X-13, R/W NO. 520121

REVISIONS

ADD. OXY STA. & RECVRY WELL 1: VERIF 2,12,13,14	8/19/96
ADD. PROPOSED RECOVERY WELL RW-2	5/30/96
WELLS 12,13 & 14 ADDED 12/4/95 R/W 950674	
ADDITIONAL WELLS ADDED	

DATE	TO	W.O.
5/31/96	G. GARIBAY (EAD)	
	RW	
11/13/92	DISTRIBUTION	
	ENGINEERING	
	R/W	

PRINT RECORD

ENG. REC.		DATE
DRAWN	EG	11/10/92
CHECKED	MLG	11/10/92
CHECKED	JTC	12/5/95
PROJ. APP.		
SURVEYED		10/17/92
CAD NO.		WTR002
R/W NO. 950674		920619
W.O.		S-10447

El Paso NATURAL GAS COMPANY

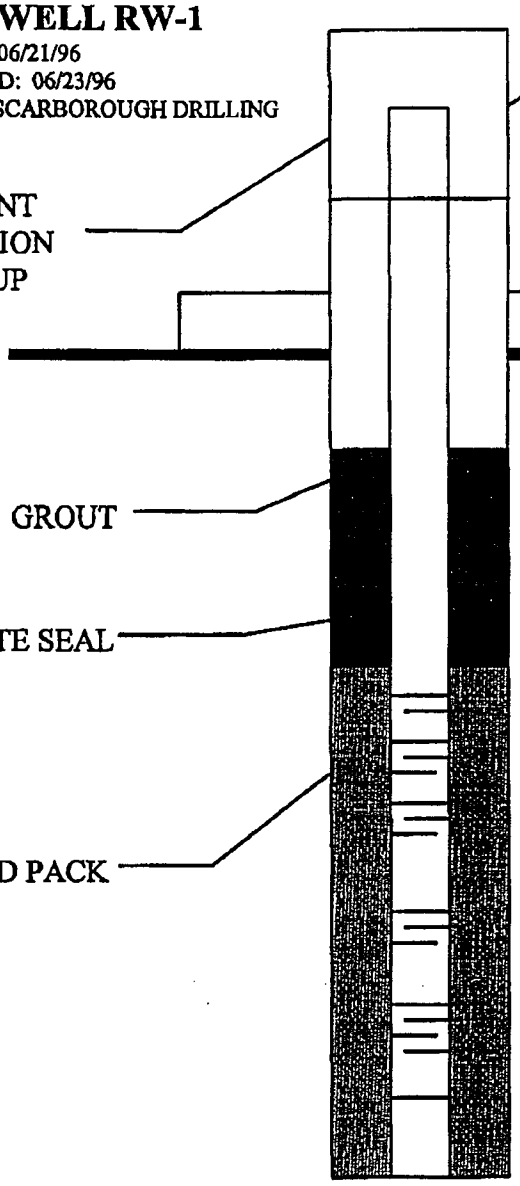
JAL NO.4 PLANT MONITORING WELLS

SECTION 5, T-24-S, R-37-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SCALE: NOTED | DWG. NO. 5004.7-X-21 | REV. D

MONITOR WELL RW-1

DATE STARTED: 06/21/96
DATE COMPLETED: 06/23/96
INSTALLED BY: SCARBOROUGH DRILLING



DEPTH IN FEET BELOW LAND SURFACE

2.0' TOP OF GROUT
102.0' TOP OF BENTONITE SEAL
107.0' TOP OF GRAVEL PACK
109.0' TOP OF SCREEN

STATIC GROUNDWATER DEPTH: 106.16'

179.0' BOTTOM OF SCREEN
180.0' TOTAL DEPTH

CASING TYPE: 10" SCH. 160 PVC
SCREEN TYPE: SCH. 160 PVC 0.35 SLOT
GRAVEL PACK: 08/16 VOLUME SILICA SAND

PHILIP ENVIRONMENTAL SERVICES CORPORATION

Monitor Well Installation Diagram

EL PASO NATURAL GAS JAL #4 PLANT
LEA COUNTY, NEW MEXICO
PROJECT NUMBER 14683

Revised August 1967

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT

To Appropriate the Underground Waters of the State of New Mexico

Date Received _____ File No. _____

1. Name of applicant El Paso Natural Gas Corp.
   Mailing address P.O. Box 1492
   City and State El Paso, Texas 79978
2. Source of water supply Shallow Water Aquifer, located in Lea County Basin
   (artesian or shallow water aquifer) (name of underground basin)
3. The well is to be located in the ____ ¼ NE ¼ NW ¼, Section 5 Township 24S
   Range 37E N.M.P.M., or Tract No. ____ of Map No. ____ of the _____ District,
   on land owned by Jimmie J. Doom, Et Ux Rebecca J. (leasee), State of New Mexico (owner)
4. Description of well: name of driller Scarborough Drilling, LaMesa, Texas;
   Outside Diameter of casing 10" inches; Approximate depth to be drilled 180' feet;
5. Quantity of water to be appropriated and beneficially used 35 acre feet,
   (consumptive use, diversion)
   for Groundwater recovery for contaminant plume containment purposes.
6. Acreage to be irrigated or place of use not applicable acres.

Subdivision	Section	Township	Range	Acres	Owner

7. Additional statements or explanations The proposed well will be used for the purpose of groundwater recovery and plume containment. The recovery well pump rate is anticipated to be approximately 15 gpm. The recovered water will be conveyed via buried 4-inch polyethylene line to the Oxy Petroleum, Langlie-Mattix waterflood injection station where it will be used as additional make-up water for their secondary oil recovery operations.

I, Richard A. Sumner, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

ROSA M. THIBODEAU NOTARY PUBLIC STATE OF TEXAS EXPIRES 01-31-98

EPNG, Permittee,

By: Richard A. Sumner.

Subscribed and sworn to before me this 5th day of December, A.D., 1996.

My commission expires 1-31-98 Rosa M. Thibodeau
Notary Public

Number of this permit _____

ACTION OF STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the detriment of any others having existing rights; further provided that all rules and regulations of the State Engineer pertaining to the drilling of _____ wells be complied with; and further subject to the following conditions: _____

Proof of completion of well shall be filed on or before _____, 19_____

Proof of application of water to beneficial use shall be filed on or before _____, 19 _____

Witness my hand and seal this _____ day of _____, A.D., 19_____.

S. E. Reynolds, State Engineer

By: _____.

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of $5.00. Each of triplicate copies must be properly signed and attested.

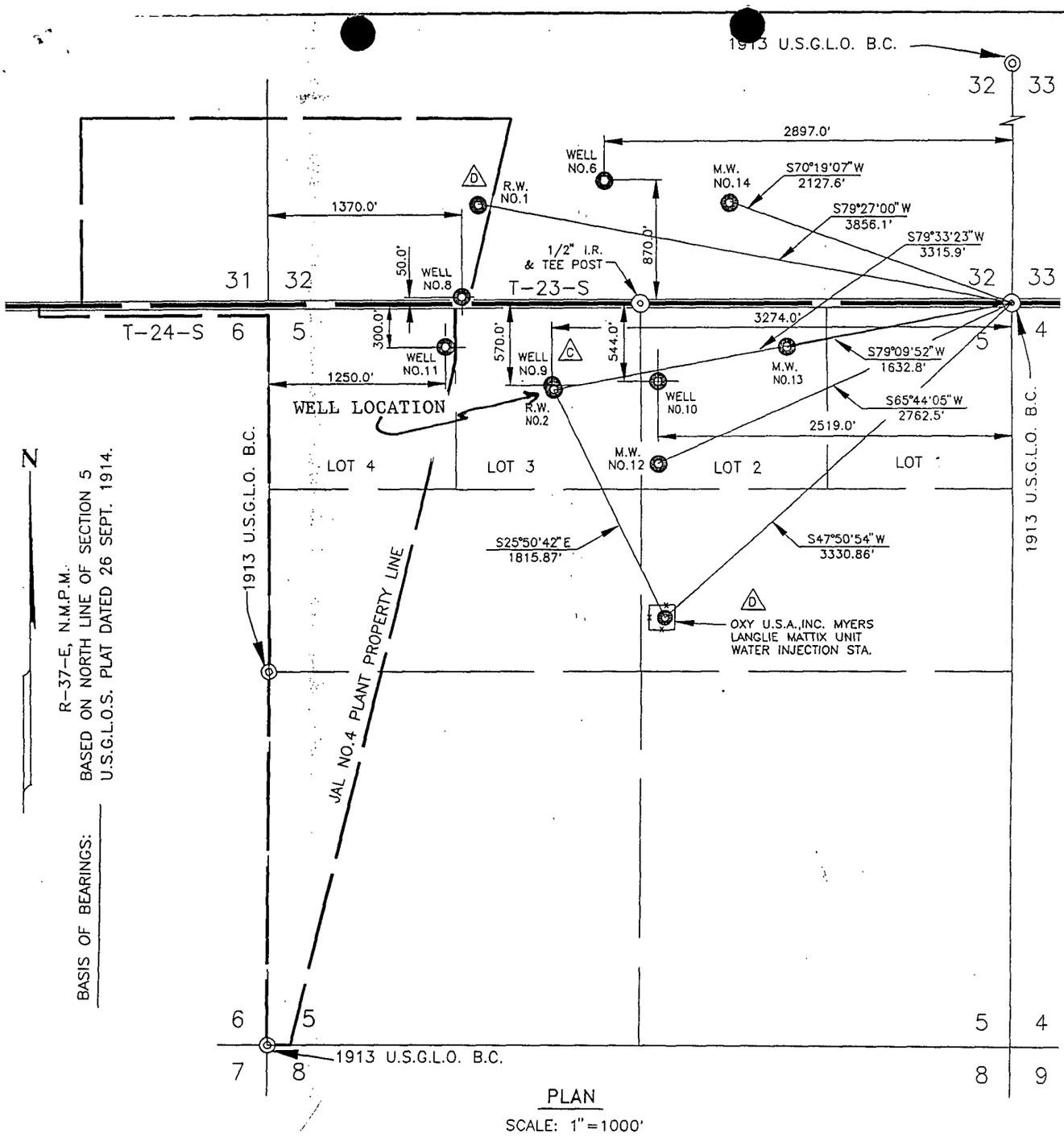
A separate application for permit must be filed for each well used.

Secs. 1–4—Fill out all blanks fully and accurately.

Sec. 5—Irrigation use shall be stated in acre feet of water per acre per annum to be applied on the land. If for municipal or other purposes, state total quantity in acre feet to be used annually.

Sec. 6—Describe only the lands to be irrigated or where water will be used. If on unsurveyed lands describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily located natural object.

Sec. 7—If lands are irrigated from any other source, explain in this section. Give any other data necessary to fully describe water right sought.



PLAN

SCALE: 1"=1000'

OWNERSHIP

SUBDIVISION	OWNER	LESSEE	RODS
ALL SECTION 5 (LESS AND EXCEPT JAL 4 PLANT TRACT)	JIMMIE J. DOOM, ET UX REBECCA J.	JIMMIE J. DOOM, ET UX REBECCA J.	
ALL SECTION 32 (LESS AND EXCEPT JAL 4 PLANT TRACT)	STATE OF NEW MEXICO	JIMMIE J. DOOM, ET UX REBECCA J.	

EF. DWG.:5004.1-X-13, R/W NO. 520121

REVISIONS

ADD. OXY STA. & RECVRY WELL 1: VERIF 2,12,13,14	8/19/96
ADD. PROPOSED RECOVERY WELL RW-2	5/30/96
WELLS 12,13 & 14 ADDED 12/4/95 R/W 950674	
ADDITIONAL WELLS ADDED	

DATE	TO	W.O.
5/31/96	G. GARIBAY (EAD)	
	RW	
11/13/92	DISTRIBUTION	
	ENGINEERING	
	R/W	

PRINT RECORD

ENG. REC.		DATE
DRAWN	EG	11/10/92
CHECKED	MLG	11/10/92
CHECKED	JTC	12/5/95
PROJ. APP.		
SURVEYED		10/17/92
CAD NO.		WTR002
R/W NO. 950674		920619
W.O.		S-10447

El Paso NATURAL GAS COMPANY

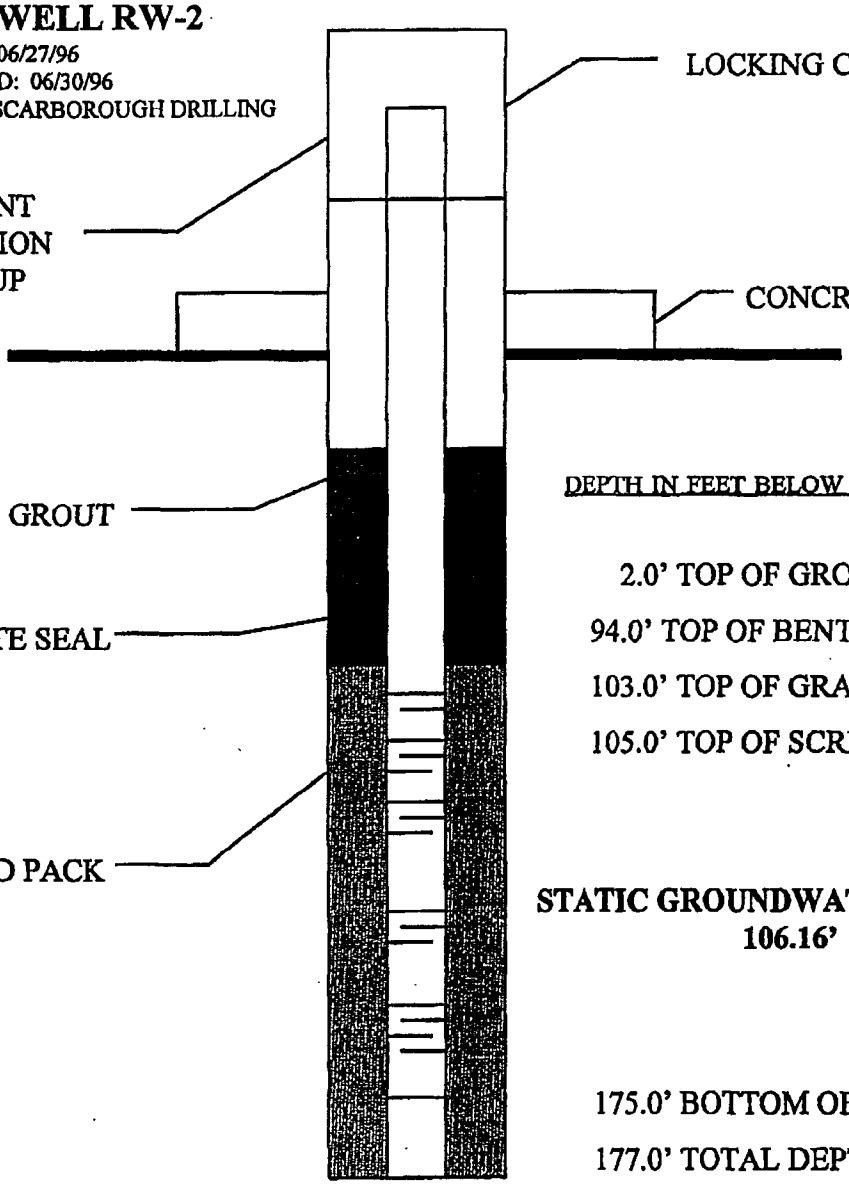
JAL NO.4 PLANT MONITORING WELLS

SECTION 5, T-24-S, R-37-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SCALE	NOTED	DWG. NO.	5004.7-X-21	REV. D

MONITOR WELL RW-2

DATE STARTED: 06/27/96
DATE COMPLETED: 06/30/96
INSTALLED BY: SCARBOROUGH DRILLING



DEPTH IN FEET BELOW LAND SURFACE

2.0' TOP OF GROUT
94.0' TOP OF BENTONITE SEAL
103.0' TOP OF GRAVEL PACK
105.0' TOP OF SCREEN

STATIC GROUNDWATER DEPTH: 106.16'

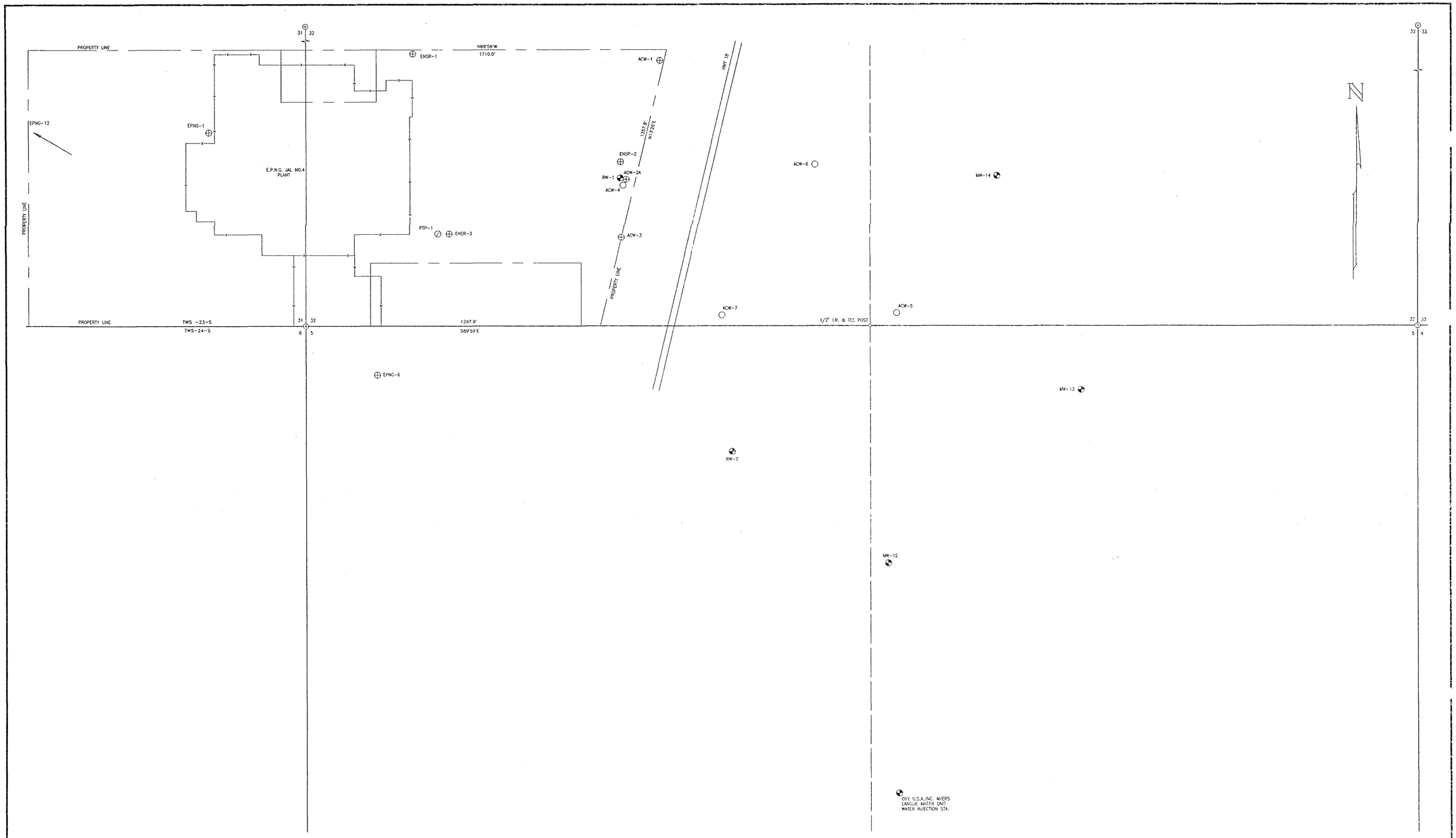
175.0' BOTTOM OF SCREEN
177.0' TOTAL DEPTH

CASING TYPE: 10" SCH. 160 PVC
SCREEN TYPE: SCH. 160 PVC 0.35 SLOT
GRAVEL PACK: 08/16 VOLUME SILICA SAND

PHILIP ENVIRONMENTAL SERVICES CORPORATION

Monitor Well Installation Diagram

EL PASO NATURAL GAS JAL #4 PLANT
LEA COUNTY, NEW MEXICO
PROJECT NUMBER 14683



DWG. NO.	TITLE
5004.7-X-21	PLANT MONITORING WELLS

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION	W.O.	AFP.	PRT.	SEP.	DATE	TO	W.O.

REVISIONS

PRINT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN		
CAD DRAFTING	JRM	8/30/96
CHECKED	MJ	8/30/96
PROJECT APPROVAL		
SURVEY DATE		
R/W NUMBER		
COMPUTER FILE NAME	J41P62	

El Paso NATURAL GAS COMPANY

JAL NO.4 PLANT
GROUNDWATER MONITORING
WELL LOCATIONS

SCALE: 1"=200'
W.O.:
DWG. NO. J4-1-P62
REV.

FM9 (Rev. 05/96) LEGEND

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PHILIP
ENVIRONMENTAL

Environmental Services Group
Southern Region

October 22, 1996
Project Number 14683

RECEIVED
OCT 23 1996
Environmental Bureau
Oil Conservation Division

Mr. William Olson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Subject: Phase II Site Assessment of the former Jal No. 4 Gas Plant in Jal, New Mexico

Dear Mr. Olsen,

Philip Environmental Services Corporation (Philip) is pleased to submit this Phase II report to the New Mexico Oil Conservation Division (NMOCD) on behalf of El Paso Natural Gas Company (EPNG) for the above referenced facility. If you have any questions about the assessment or the report, please do not hesitate to call Jeffrey Kindley of Philip Environmental at (915) 563-0118.

Sincerely,

PHILIP ENVIRONMENTAL SERVICES CORPORATION

Jeffrey Kindley

Jeffrey Kindley, P.G.
Project Manager/Geologist

Attachment:
Report

PHILIP ENVIRONMENTAL SERVICES CORPORATION
7904 Interstate 20 West • Midland, TX 79706
(915) 563-0118 • Fax (915) 563-9526

El Paso Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

RECEIVED
OCT - 2 1996
OIL CONSERVATION

September 30, 1996

RECEIVED
OCT 2 1996
Environmental Bureau
Oil Conservation Division

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Third Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Richard Sumner at 915/541-5341.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

9/30/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.9	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	1.0	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.8	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	[illegible]
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	1.0	78	<0.006	0.56	100	0.069	16	4300	<0.010	6.1	3	1.9	2.8	830	620	2.1	280	[illegible]
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.6	2.7	3	<7.5	759	630	2.06	293	41
5/8/96	S96-0263	Monitor Well ACW #01	4130	8190	14620	8.2	2.2	<1.25	1.0	93	0.01	0.6	118	0.09	18	3070	<0.05	6.3	2.03	<1.0	<3.0	310	718	<1.25	268	54
8/13/96	S96-0381	Monitor Well ACW #01	3500	7400	12000	8.1	4.9	<0.05	1.1	110	0.019	0.68	100	0.078	8.6	2400	0.008	3.5	1.2	<1.0	<2.0	730	690	1.9	270	41
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.9	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1.0	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/16/96	S96-0062*	Monitor Well ACW #05	506	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
5/8/96	S96-0258	Monitor Well ACW #05	519	2460	3650	7.2	0.42	5	0.8	167	0.01	0.2	24	<0.05	8	506	<0.05	<1.0	<1.0	<1.0	<3.0	190	515	4.5	653	35
8/13/96	S96-0385	Monitor Well ACW #05	500	2500	3400	7.3	0.7	5.4	2.0	200	<0.006	0.024	28	<0.007	6.3	520	0.033	<1.0	1.2	<1.0	<2.0	320	620	1	710	58
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.9	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.9	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	<0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50
5/8/96	S96-0257	Monitor Well ACW #06	2880	6460	10620	7.7	6.4	<1.25	1.3	35	0.02	4.1	21	0.14	4	2380	<0.05	4.08	1.58	<1.0	<3.0	1396	175	<1.25	48	40
8/14/96	S96-0321	Monitor Well ACW #06	2900	7100	11000	7.9	21	<0.05	1.2	85	<0.006	4.5	23	0.13	3.4	2900	0.024	4.2	2.6	<2.0	<2.0	1400	310	1.8	88	60

* Analysis done by T.O.E. Lab

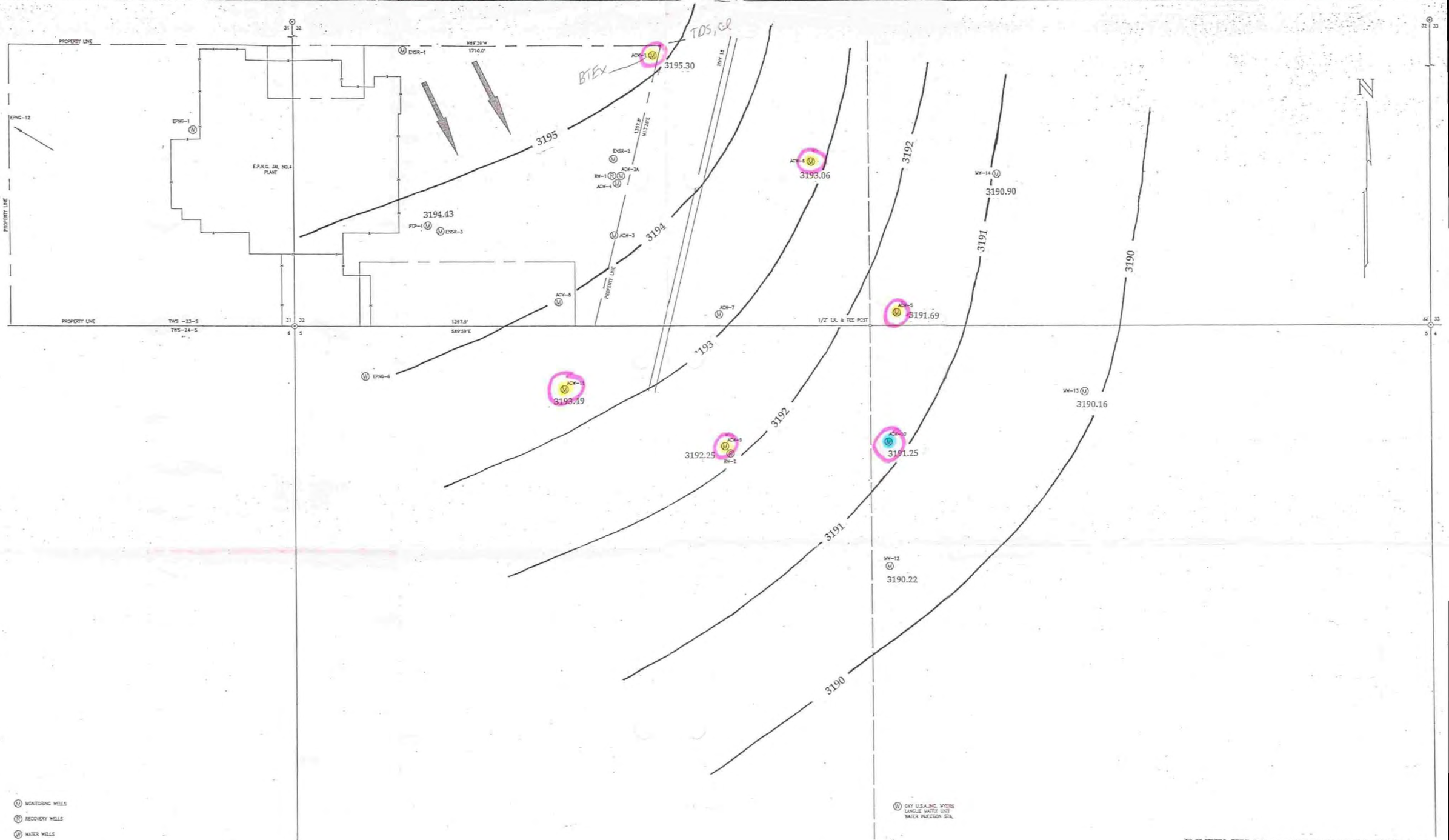
Jal4Qgr96.xls

JAL #4 MONITOR WELL

9/30/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.4	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.4	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.4	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.4	570	<0.006	0.48	180	0.71	14	810	<0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4620	7450	6.8	0.36	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
5/8/96	S96-0259	Monitor Well ACW #09	2210	4210	7530	6.8	0.35	<1.25	<0.5	508	0.01	0.4	183	0.49	17	687	<0.05	<1.0	<1.0	<1.0	<3.0	209	2020	3	322	60
8/14/96	S96-0326	Monitor Well ACW #09	1200	3600	4400	7.4	1.4	0.13	0.4	490	<0.006	0.66	160	0.65	13	730	0.027	1.4	1.6	<1.0	<2.0	220	1900	1.2	180	53
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.3	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.3	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.2	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.3	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
5/8/96	S96-0261	Monitor Well ACW #10	603	1290	2322	7.2	0.46	2.2	<0.5	206	<0.01	0.1	92	<0.05	8	127	<.05	1.22	<1.0	<1.0	<3.0	137	893	4.5	190	62
8/14/96	S96-0327	Monitor Well ACW #10	560	1900	2400	7.6	1.4	0.58	0.3	210	<0.006	0.14	71	0.019	7	140	0.037	<1.0	<1.0	<1.0	<2.0	170	810	0.82	160	47
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.3	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.4	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.3	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	<0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46
5/8/96	S96-0262	Monitor Well ACW #11	3120	5080	9840	7.3	0.37	<1.25	<0.5	484	0.02	0.3	220	0.09	29	1160	<0.05	6.76	<1.0	<1.0	<3.0	111	2110	<1.25	206	50
8/13/96	S96-0383	Monitor Well ACW #11	4200	10000	12000	7.3	1.0	0.18	0.4	540	0.013	0.28	190	0.061	24	1700	0.12	7.9	2.2	<1.0	<2.0	160	2100	2	230	47

* Analysis done by T.O.E. Lab



POTENTIOMETRIC SURFACE MAP

August 1996

DWG. NO.	TITLE
5004.7-X-21	PLANT MONITORING WELLS

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION
2	9/30/96	JRM	REVISED WELL SYMBOLS
1	9/24/96	JRM	ADDED WELLS 3,8,9,10,11

REVISIONS

W.O.	APP.	PRT. REP.	DATE	TO	W.O.

PRINT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN		
CAD DRAFTING	JRM	8/30/96
CHECKED	MJ	8/30/96
PROJECT APPROVAL		
SURVEY DATE		
R/W NUMBER		
COMPUTER FILE NAME	J41P62	

El Paso NATURAL GAS COMPANY

JAL NO.4 PLANT
GROUNDWATER MONITORING
WELL LOCATIONS

SCALE: 1"=200'

W.O.:

DWG. NO. J4-1-P62

WAS ENV067 IN E:\ENVIRON\GENERAL

Fw8 (Rev. 05/96)

LEGEND

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

RECEIVED
JUL - 1 1996
OIL CONSERVATION DIVISION

June 27, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Second Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

6/24/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.4	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.4	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.4	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.4	570	<0.006	0.48	180	0.71	14	810	<0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4620	7450	6.8	0.36	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
5/8/96	S96-0259	Monitor Well ACW #09	2210	4210	7530	6.8	0.35	<1.25	<0.5	508	0.01	0.4	183	0.49	17	687	<0.05	<1.0	<1.0	<1.0	<3.0	209	2020	3	322	60
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.3	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.3	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.2	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.3	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
5/8/96	S96-0261	Monitor Well ACW #10	603	1290	2322	7.2	0.46	2.2	<0.5	206	<0.01	0.1	92	<0.05	8	127	<.05	1.22	<1.0	<1.0	<3.0	137	893	4.5	190	62
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.3	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.4	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.3	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	<0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46
5/8/96	S96-0262	Monitor Well ACW #11	3120	5080	9840	7.3	0.37	<1.25	<0.5	484	0.02	0.3	220	0.09	29	1160	<0.05	6.76	<1.0	<1.0	<3.0	111	2110	<1.25	206	50

* Analysis done by T.O.E. Lab

Jal42qrt96.xls

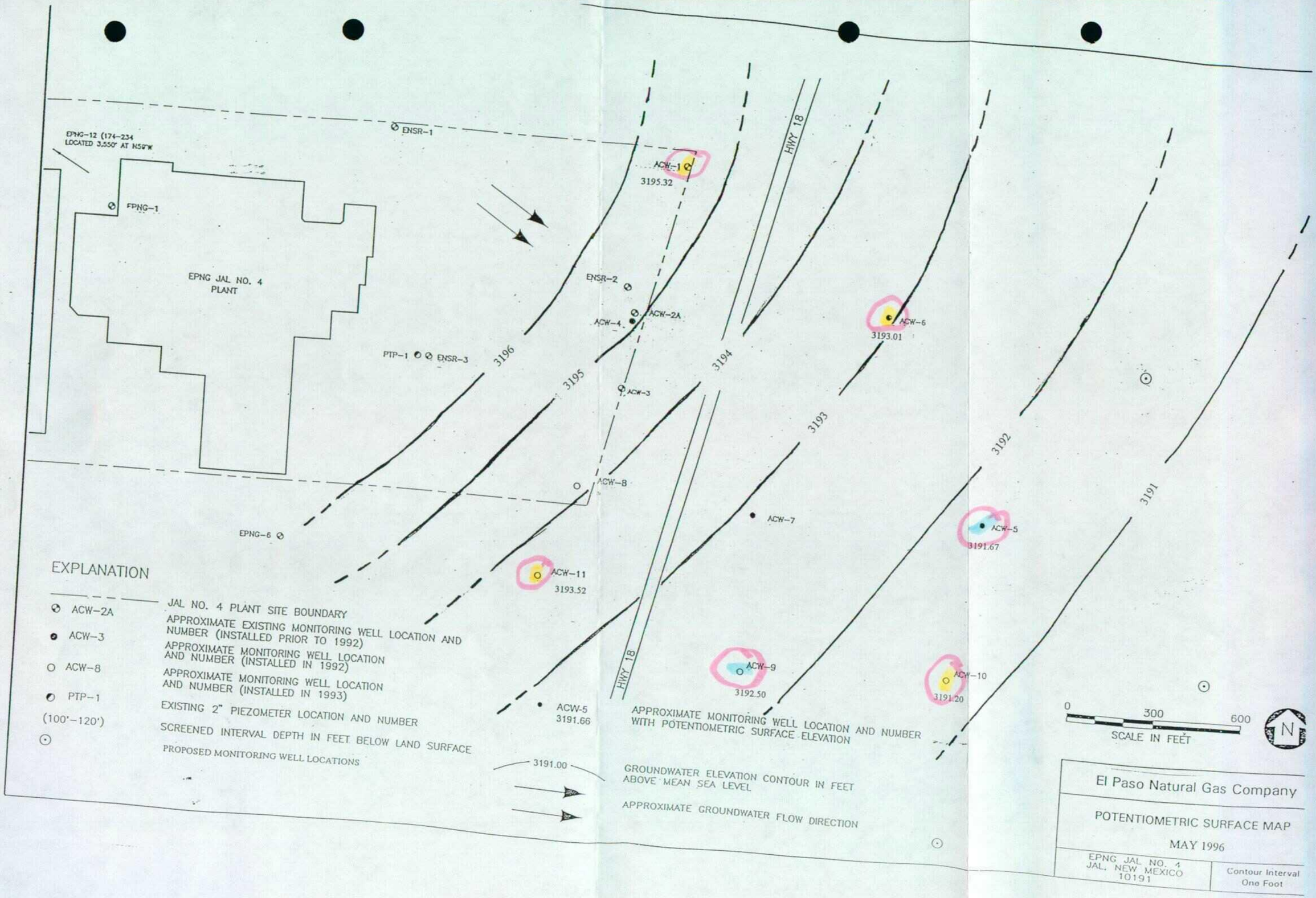
JAL #4 MONITOR WELL

6/24/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.9	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	1.0	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.8	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	1.0	78	<0.006	0.56	100	0.069	16	4300	<0.010	6.1	3	1.9	2.8	830	620	2.1	280	
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.6	2.7	3	<7.5	759	630	2.06	293	41
5/8/96	S96-0263	Monitor Well ACW #01	4130	8190	14620	8.2	2.2	<1.25	1.0	93	0.01	0.6	118	0.09	18	3070	<0.05	6.3	2.03	<1.0	<3.0	310	718	<1.25	268	54
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.9	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1.0	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/16/96	S96-0062*	Monitor Well ACW #05	506	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
5/8/96	S96-0258	Monitor Well ACW #05	519	2460	3650	7.2	0.42	5	0.8	167	0.01	0.2	24	<0.05	8	506	<0.05	<1.0	<1.0	<1.0	<3.0	190	515	4.5	653	35
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.9	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.9	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	<0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50
5/8/96	S96-0257	Monitor Well ACW #06	2880	6460	10620	7.7	6.4	<1.25	1.3	35	0.02	4.1	21	0.14	4	2380	<0.05	4.08	1.58	<1.0	<3.0	1396	175	<1.25	48	40

* Analysis done by T.O.E. Lab

Jal42qr96.xls


EPNG-12 (174-234
LOCATED 3,550' AT N58°W
ENSR-1
EPNG-1
EPNG JAL NO. 4
PLANT
ACW-1
3195.32
HWY 18
ENSR-2
ACW-2A
ACW-4
ACW-6
3193.01
PTP-1
ENSR-3
3196
3195
3194
3193
3192
3191
ACW-3
ACW-8
ACW-7
ACW-5
3191.67
EPNG-6
ACW-11
3193.52
ACW-9
3192.50
ACW-10
3191.20
ACW-5
3191.66
0
300
600
SCALE IN FEET
N
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A
APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1
EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120')
SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
PROPOSED MONITORING WELL LOCATIONS
APPROXIMATE MONITORING WELL LOCATION AND NUMBER WITH POTENTIOMETRIC SURFACE ELEVATION
3191.00
GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
El Paso Natural Gas Company
POTENTIOMETRIC SURFACE MAP
MAY 1996
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
Contour Interval
One Foot

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

June 13, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Ground Water Remediation/Investigation
EPNG Jal No. 4 Gas Plant
Lea County, New Mexico

Dear Mr. Olson:

Problems were encountered obtaining access agreements with the New Mexico Highway Department, the State of New Mexico, the Texas-New Mexico Railroad and a local landowner. As a result, the proposed field work was delayed.

All access agreements are now in place. As stated in our telephone conversation on June 10, 1996 monitor well drilling is scheduled to begin on Monday, June 17 and conclude on Friday, June 21. Monitor well installation and completion will follow the well design specified in El Paso Natural Gas Company's (EPNG) June 28, 1995 "GROUND WATER REMEDIATION/INVESTIGATION, PROJECT WORK PLAN REVISIONS, EPNG JAL. NO. 4, LEA COUNTY, NEW MEXICO". This document was approved on August 10, 1995 with the following conditions:

1. All monitor wells will be constructed as set out below:

    a. An appropriately sized gravel pack will be set around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

    b. A 2-3 foot bentonite plug will be placed above the gravel pack.

    c. The remainder of the hole will be sealed with cement containing 5% bentonite.

2. EPNG will develop each well upon completion using EPA approved procedures.

3. Ground water from the monitor wells will be sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX), major cations and anions, heavy metals and polynuclear aromatic hydrocarbons using EPA approved methods.

4. EPNG will submit a report on the investigation to the OCD by November 3, 1995. The report will contain:

   a. A description of all activities which occurred during the investigation, conclusions and recommendations.

   b. A summary of the laboratory analytic results of water quality sampling of the monitor wells.

   c. A water table elevation map using the water table elevation of the ground water in all monitor wells.

   d. A geologic log and as built well completion diagram for each well.

5. EPNG will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and or split samples.

6. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

A recovery well will be installed adjacent to ACW-4 and ACW-9, respectively. Drilling of these recovery wells is scheduled to begin on Saturday, June 22 and conclude on June 28, 1996.

As a result of the previously described problems, field work was delayed and the investigation report was not submitted by November 3, 1995, as requested. With the current drilling schedule, it is anticipated an investigation report will be submitted to OCD by August 30, 1996; approximately 60 days after completion of all monitoring well installation.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

OIL CONSER DIVISION
RE
'96 MA 1 8 52

March 26, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
First Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

3/26/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
[illegible]7/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
[illegible]/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.88	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	0.95	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.82	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	28
2/6/96	S96-0063	Monitor Well ACW #01	5200	9700	16000	8.3	0.88	0.02	0.99	78	<0.006	0.56	100	0.069	16	4300	<0.010	6.1	3	1.9	2.8	830	620	2.1	280	36
2/6/96	S96-0064*	Monitor Well ACW #01	5770	9440	16170	8.2	2.1	<1.25	1.1	84	<0.1	0.7	102	0.1	17	3900	<0.1	5.6	2.7	3	<7.5	759	630	2.06	293	41
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.94	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
2/6/96	S96-0061	Monitor Well ACW #05	510	2200	3800	7.5	0.12	4.7	1.4	240	<0.006	1.5	32	0.026	6.5	580	0.015	<1.0	<1.0	<1.0	<2.0	260	740	0.92	920	64
2/16/96	S96-0062*	Monitor Well ACW #05	506	2745	3090	7.3	0.29	4.9	1.4	240	<0.1	2	32	0.1	8.1	580	<0.1	<2.5	<2.5	<2.5	<7.5	284	730	<1.25	835	66
[illegible]8/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
[illegible]/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.94	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.85	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
2/6/96	S96-0059	Monitor Well ACW #06	2600	6600	11000	8.0	3.8	<0.0071	1.1	91	<0.006	4.6	23	0.12	3.6	2700	0.029	6.6	3.2	<1.0	<2.0	1400	320	1.3	72	62
2/6/96	S96-0060*	Monitor Well ACW #06	3180	5630	10320	7.8	10	<1.25	1.3	76	<0.1	5	21	0.1	3.6	2400	<0.1	<2.5	<2.5	<2.5	<7.5	1315	275	1.52	79	50

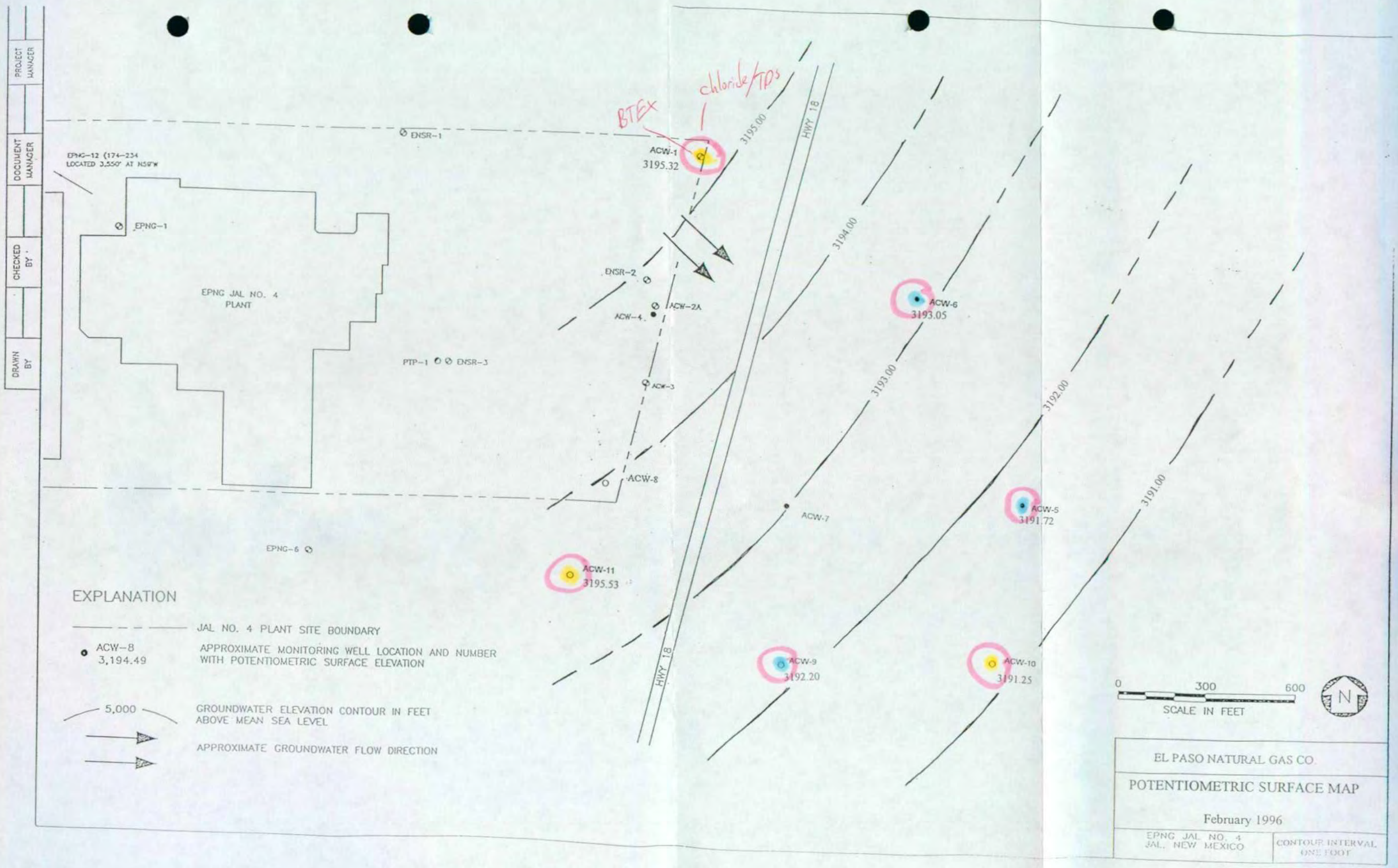
* Analysis done by T.O.E. Lab

JAL #4 MONITOR WELL

3/26/96

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
[illegible]/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
[illegible]/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.41	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.44	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.39	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
2/7/96	S96-0069	Monitor Well ACW #09	2400	5400	7500	7.7	0.16	0.039	0.35	570	<0.006	0.48	180	0.71	14	810	<0.010	1.8	<1.0	<1.0	<2.0	300	2200	1.5	320	47
2/7/96	S96-0070*	Monitor Well ACW #09	2300	4620	7450	6.8	0.36	<1.25	0.4	600	<0.1	0.4	175	0.7	16	810	<0.1	<2.5	<2.5	<2.5	<7.5	291	2220	1.85	341	56
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.28	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.25	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.24	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
2/7/96	S95-0071	Monitor Well ACW #10	850	2300	3200	7.8	0.24	0.42	0.26	320	<0.006	0.24	110	0.032	8.4	190	0.011	3.9	<1.0	<1.0	<2.0	200	1200	0.88	230	36
2/7/96	S96-0072*	Monitor Well ACW #10	829	2100	3100	7.1	0.44	<1.25	0.3	320	<0.1	0.4	107	<0.1	9.4	190	<0.1	4.3	<2.5	<2.5	<7.5	194	1240	<1.25	242	54
[illegible]/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
[illegible]5/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.32	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.35	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.29	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
2/7/96	S96-0065	Monitor Well ACW #11	3400	7400	11000	7.8	0.15	0.087	0.3	660	<0.006	0.38	230	0.13	26	1500	<0.010	6.9	<1.0	<1.0	<2.0	210	2600	1.5	230	47
2/7/96	S96-0066*	Monitor Well ACW #11	3770	6740	11030	7.2	0.39	<1.25	0.4	668	<0.1	0.5	224	0.1	31	1400	<0.1	7.6	<2.5	<2.5	<7.5	200	2590	1.6	248	46

* Analysis done by T.O.E. Lab


PROJECT MANAGER
DOCUMENT MANAGER
CHECKED BY
DRAWN BY
EPNG-12 (174-234
LOCATED 3,550' AT N58°W
EPNG-1
EPNG JAL NO. 4
PLANT
EPNG-6
ENSR-1
ENSR-2
ENSR-3
PTP-1
ACW-1
3195.32
BTEX
chloride/TDS
ACW-2A
ACW-4
ACW-3
ACW-8
ACW-7
ACW-11
3195.53
ACW-6
3193.05
ACW-5
3191.72
ACW-9
3192.20
ACW-10
3191.25
HWY 18
3195.00
3194.00
3193.00
3192.00
3191.00
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-8
3,194.49
APPROXIMATE MONITORING WELL LOCATION AND NUMBER
WITH POTENTIOMETRIC SURFACE ELEVATION
5,000
GROUNDWATER ELEVATION CONTOUR IN FEET
ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
600
SCALE IN FEET
N
EL PASO NATURAL GAS CO.
POTENTIOMETRIC SURFACE MAP
February 1996
EPNG JAL NO. 4
JAL, NEW MEXICO
CONTOUR INTERVAL
ONE FOOT

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

January 19, 1996

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RECEIVED
JAN 22 1996
Environmental Bureau
Oil Conservation Division

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Fourth Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

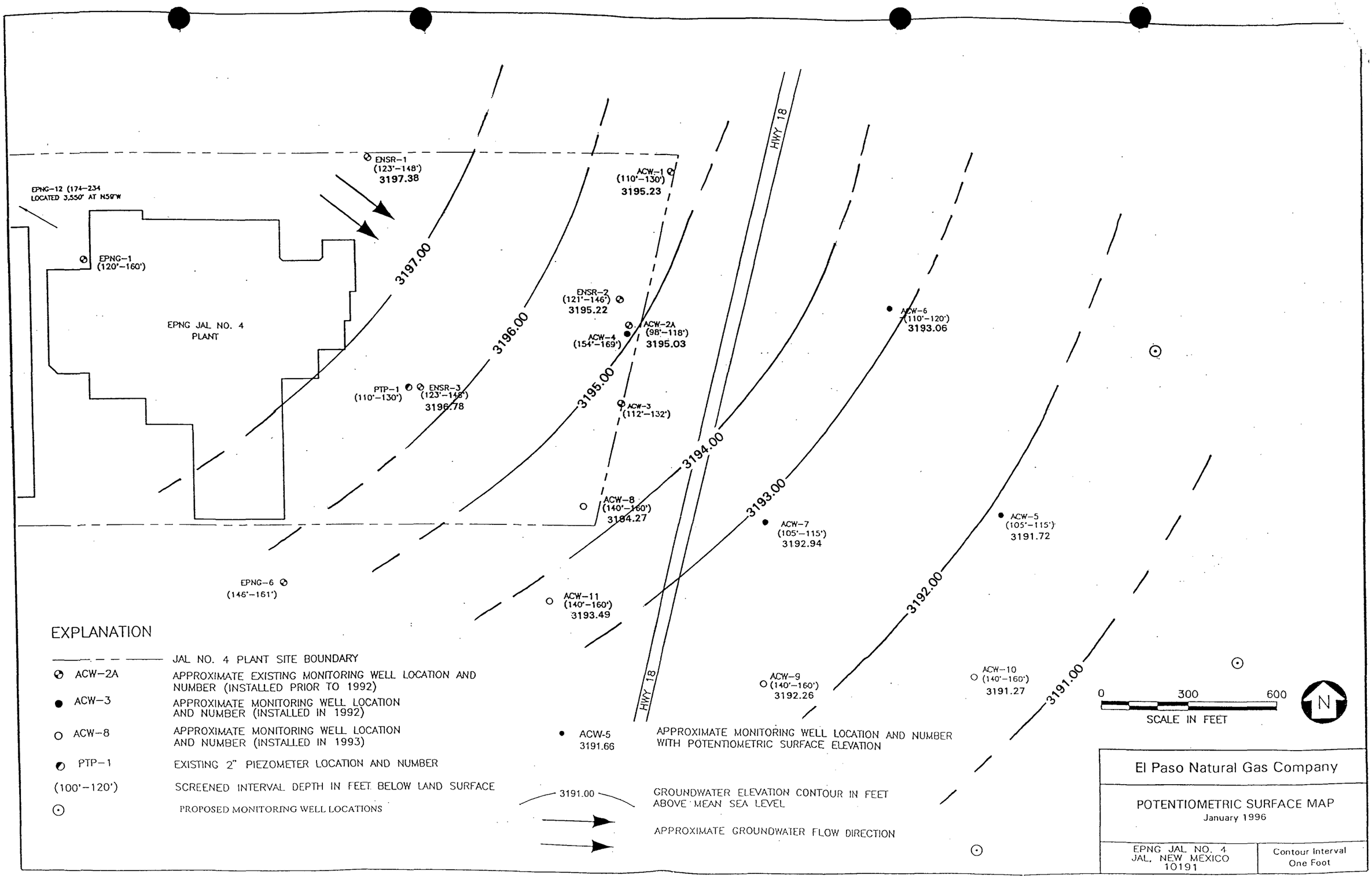
cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.88	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	0.95	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.82	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	28
10/25/95	S95-0659	Monitor Well ACW #01	3600	6170	8860	8.2	18	<2.0	0.76	97	<0.025	0.74	94	0.097	8.6	1800	<0.020	7	3	2	4	670	578	1.51	240	16.6
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.94	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
10/25/95	S95-0674	Monitor Well ACW #05	520	1840	3140	7.2	<1.0	3.7	1.1	260	<0.025	0.14	36	<0.015	7.3	530	<0.020	<5	<10	<5	<15	321	824	1.04	860	31.1
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.94	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.85	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42
10/26/95	S95-0678	Monitor Well ACW #06	3200	7070	9660	8.4	27	<20	1	89	<0.025	4.4	22	0.11	5.2	2200	0.025	8	3	<1	<3	1450	227	1.23	130	28.8

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.41	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.44	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.39	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
10/25/95	S95-0669	Monitor Well ACW #09	3500	5110	8890	6.6	<1.0	<2.0	0.4	670	<0.025	0.33	210	0.83	13	890	<0.020	<1	<2	<1	<3	336	2930	1.72	390	25.8
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.28	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.25	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.24	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
10/25/95	S95-0672	Monitor Well ACW #10	960	2090	2710	7.1	<1	<2	0.24	250	<0.025	0.2	87	0.04	6.2	130	<0.020	<5	<10	<5	<15	199	1320	2.48	240	21.5
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.32	740	<0.025	0.38	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.35	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.29	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44
10/25/95	S95-0665	Monitor Well ACW #11	3000	5320	7770	7.0	<1.0	<2.0	0.32	630	<0.025	0.3	220	0.15	17	1100	<0.020	8	<2	<1	<3	242	2180	1.47	220	21.8


EPNG-12 (174-234
LOCATED 3,550' AT N58°W
EPNG-1
(120'-160')
EPNG JAL NO. 4
PLANT
ENSR-1
(123'-148')
3197.38
ACW-1
(110'-130')
3195.23
ENSR-2
(121'-146')
3195.22
ACW-2A
(98'-118')
3195.03
ACW-4
(154'-169')
ACW-6
(110'-120')
3193.06
PTP-1
(110'-130')
ENSR-3
(123'-148')
3196.78
ACW-3
(112'-132')
ACW-8
(140'-160')
3194.27
ACW-7
(105'-115')
3192.94
ACW-5
(105'-115')
3191.72
EPNG-6
(146'-161')
ACW-11
(140'-160')
3193.49
ACW-9
(140'-160')
3192.26
ACW-10
(140'-160')
3191.27
ACW-5
3191.66
3197.00
3196.00
3195.00
3194.00
3193.00
3192.00
3191.00
HWY 18
HWY 18
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A
APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1
EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120')
SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
PROPOSED MONITORING WELL LOCATIONS
APPROXIMATE MONITORING WELL LOCATION AND NUMBER WITH POTENTIOMETRIC SURFACE ELEVATION
3191.00
GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
600
SCALE IN FEET
N
El Paso Natural Gas Company
POTENTIOMETRIC SURFACE MAP
January 1996
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
Contour Interval
One Foot

The Santa Fe New Mexican

Since 1849. We Read You.

NM OIL DIVISION
ATTN: SALLY MARTINEZ
2040 S. PACHECO ST
SANTA FE, NM 87505

AD NUMBER: 612085 ACCOUNT: 56689

LEGAL NO: 61299 P.O. #: 96-199-002997

294 LINES ONCE at $ 117.60

Affidavits: 5.25

Tax: 7.68

Total: $ 130.53

RECEIVED
MAR - 5 1997
Environmental Bureau
Oil Conservation Division

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 61299 a copy of which is hereto attached was published in said newspaper once each WEEK for ONE consecutive week(s) and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 4 day of MARCH 1996 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ Betsy Perner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 4 day of MARCH A.D., 1996

OFFICIAL SEAL
Candace C. Ruiz
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires: 9/27/99

Candace C. Ruiz

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal applications have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico, 87505, Telephone (505) 827-7131:

(GW-107) - Sid Richardson Gasoline, Co., Mr. Wayne Farley, (817)-390-8686, 201 N. Main, Fort Worth, TX, 76102, has submitted a Discharge Plan Renewal Application for their Jal #4 Compressor Station located in the SE/4, Section 31, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 105 feet with a total dissolved solids concentration of approximately 331 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-120) - Amoco Production Company, Mr. Buddy Shaw, (505)-326-9219, 200 Amoco Court, Farmington, NM, 87401, has submitted a Discharge Plan Renewal Application for their Pipkin Compressor Station located in the NW/4 NW/4, Section 36, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 10 feet with a total dissolved solids concentration of approximately 1000 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-104) - Yates Petroleum Corporation, Mr. John F. Brown, (505)-748-4219, 105 S. 4th Street, Artesia, NM, 88210, has submitted a Discharge Plan Renewal Application for their Algerita Compressor Station located in the SE/4 NE/4, Section 16, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 250 feet with a total dissolved solids concentration of approximately 387 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-105) - Yates Petroleum Corporation, Mr. John F. Brown, (505)-748-4219, 105 S. 4th Street, Artesia, NM, 88210, has submitted a Discharge Plan Renewal Application for their Larue Compressor Station located in the SE/4 NW/4, Section 3, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 250 feet with a total dissolved solids concentration of approximately 387 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan renewal applications may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan renewal based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan renewal based on the information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 24th day of February 1997.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY,
Director

Legal #61299
Pub. March 4, 1997

RECEIVED
MAR - 5 1997
Environmental Bureau
Oil Conservation Division

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal applications have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-107) - Sid Richardson Gasoline, Co., Mr. Wayne Farley, (817)-390-8686, 201 N. Main, Fort Worth, TX, 76102, has submitted a Discharge Plan Renewal Application for their Jal # 4 Compressor Station located in the SE/4, Section 31, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 105 feet with a total dissolved solids concentration of approximately 331 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-120) - Amoco Production Company, Mr. Buddy Shaw, (505)-326-9219, 200 Amoco Court, Farmington, NM, 87401, has submitted a Discharge Plan Renewal Application for their Pipkin Compressor Station located in the NW/4 NW/4, Section 36, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 10 feet with a total dissolved solids concentration of approximately 1000 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-104) - Yates Petroleum Corporation, Mr. John F. Brown, (505)-748-4219, 105 S. 4th Street, Artesia, NM, 88210, has submitted a Discharge Plan Renewal Application for their Algerita Compressor Station located in the SE/4 NE/4, Section 16, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 250 feet with a total dissolved solids concentration of approximately 387 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-105) - Yates Petroleum Corporation, Mr. John F. Brown, (505)-748-4219, 105 S. 4th Street, Artesia, NM, 88210, has submitted a Discharge Plan Renewal Application for their Larue Compressor Station located in the SE/4 NW/4, Section 3, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 250 feet with a total dissolved solids concentration of approximately 387 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan renewal applications may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan renewal based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan renewal based on information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 24th day of February, 1997.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

S E A L

WILLIAM J. LEMAY, Director

WJL/pws

SID RICHARDSON GASOLINE CO.
201 MAIN STREET, SUITE 3000
FORT WORTH, TEXAS 76102

ROBERT L. GAWLIK
ENVIRONMENTAL HEALTH
& SAFETY ASSOCIATE

817/390-8600

February 18, 1997
RLG-26-97

CERTIFIED MAIL - Z 378 134 333
Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, New Mexico 87505

RECEIVED
FEB 21 1997
CONSERVATION DIVISION

Re: Discharge Plan GW-107 Renewal
Jal #4 Compressor Station - Lea County, New Mexico

Dear Mr. Anderson:

In response to your December 9, 1996 notification letter regarding the renewal of our discharge plan for Jal #4, enclosed are the sections that changes or updates were made.

The following sections were updated or changed:

- All of "Index" Section - Update Pages 1-8
- Appendices: A - Add - Topo of Plant Location
  E - Groundwater Analysis (1997)
  F - Revised MSDS (change out all)
  G - Hauling/Disposal Contractors

FEB 21 1997
Environmental Bureau
Oil Conservation Division

NOTE: Remove old information and include new package.

With this letter, I have enclosed two copies of the update/changes for your office and the Groundwater Discharge Plan Renewal Application. Also, one copy of the renewal application and the plan update/changes are being sent to NMOCD District I office in Hobbs, attention Jerry Sexton.

If there should be any questions regarding information in our discharge plan renewal, do not hesitate to call.

Sincerely,

Robert L. Gawlik

RLG:gad
Enclosures

c: C. P. O'Farrell/H. Harless - w/enclosures (1)
W. J. Farley - w/enclosures (1)
K. C. Clark - w/enclosures (1)
G. W. Washburn - w/enclosures (2)
J. Sexton (OCD, P.O. Box 1980, Hobbs, NM 88240) - w/enclosures (1)

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

FEB 21 1997

Revised 12/1/9

Submit Origin.
Plus 1 Copi
to Santa I
1 Copy to appropria
District Offi

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,
GAS PLANTS, REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS
(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☐ Modification

1. Type: Compression facility

2. Operator: Sid Richardson Gasoline Co.

Address: 201 Main Street, Suite 3000 Fort Worth, TX 76102

Contact Person: Wayne J. Farley Phone: (817) 390-8686

3. Location: ____ /4 SE /4 Section 31 Township 23-S Range 37-E
Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.

5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.

6. Attach a description of all materials stored or used at the facility.

7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.

8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.

9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.

10. Attach a routine inspection and maintenance plan to ensure permit compliance.

11. Attach a contingency plan for reporting and clean-up of spills or releases.

12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.

13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

14. CERTIFICATION

I herby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Wayne J. Farley Title: Manager, Gas Operations

Signature: Wayne J. Farley Date: 2-18-97

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

December 9, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-647

Mr. Robert L. Gawlik
Environmental Health & Safety Associate
Sid Richardson Gasoline Co.
201 Main Street, Suite 3000
Fort Worth, TX 76102

RE: Discharge Plan GW-107 Renewal
Jal #4 Compressor Station
Lea County, New Mexico

Dear Mr. Gawlik:

On June 23, 1992, the groundwater discharge plan, GW-107, for the **Jal #4 Compressor Station** located in the SE/4, Section 31, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. **The approval will expire on June 23, 1997.**

If your facility continues to have potential or actual effluent or leachate discharges and you wish to continue operation, you must renew your discharge plan. **If Sid Richardson submits an application for renewal at least 120 days before the discharge plan expires (on or before February 23, 1997), then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved.** The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether you have made, or intend to make, any changes in your system, and if so, please include these modifications in your application for renewal.

Please submit the original and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request.(Copies of the WQCC regulations and discharge plan application form and guidelines have been provided to Sid Richardson in the past. If you require copies of these items notify the OCD at (505)-827-7152. A complete copy of the regulations is also available on OCD's website at **www.emnrd.state.nm.us/ocd.htm**.)

The discharge plan renewal application for the Jal #4 Compressor Station is subject to the WQCC Regulations 3114 discharge plan fee. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of fifty ($50) dollars plus a flat fee of six-hundred and ninety ($690) dollars for Compressor Stations over 3,000 horsepower.

The fifty ($50) dollar filing fee is to be submitted with discharge plan renewal application and is nonrefundable. The flat fee for an approved discharge plan renewal may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge plan.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you no longer have any actual or potential discharges a discharge plan is not needed, please notify this office. If you have any questions regarding this matter, please do not hesitate to contact Pat Sanchez at (505) 827-7156.

Sincerely,

PWS for RCA

Roger C. Anderson
Environmental Bureau Chief

RCA/pws

xc: Mr. Wayne Price - Environmental Engineer

P 288 258 647

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Gawlik, GW-107	
Street & Number Sid Richardson, Room 1.	
Post Office, State, & ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, April 1995

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

RV . ON DIVISION
ECEIVED
2 AM 8 52

September 29, 1995

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Third Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

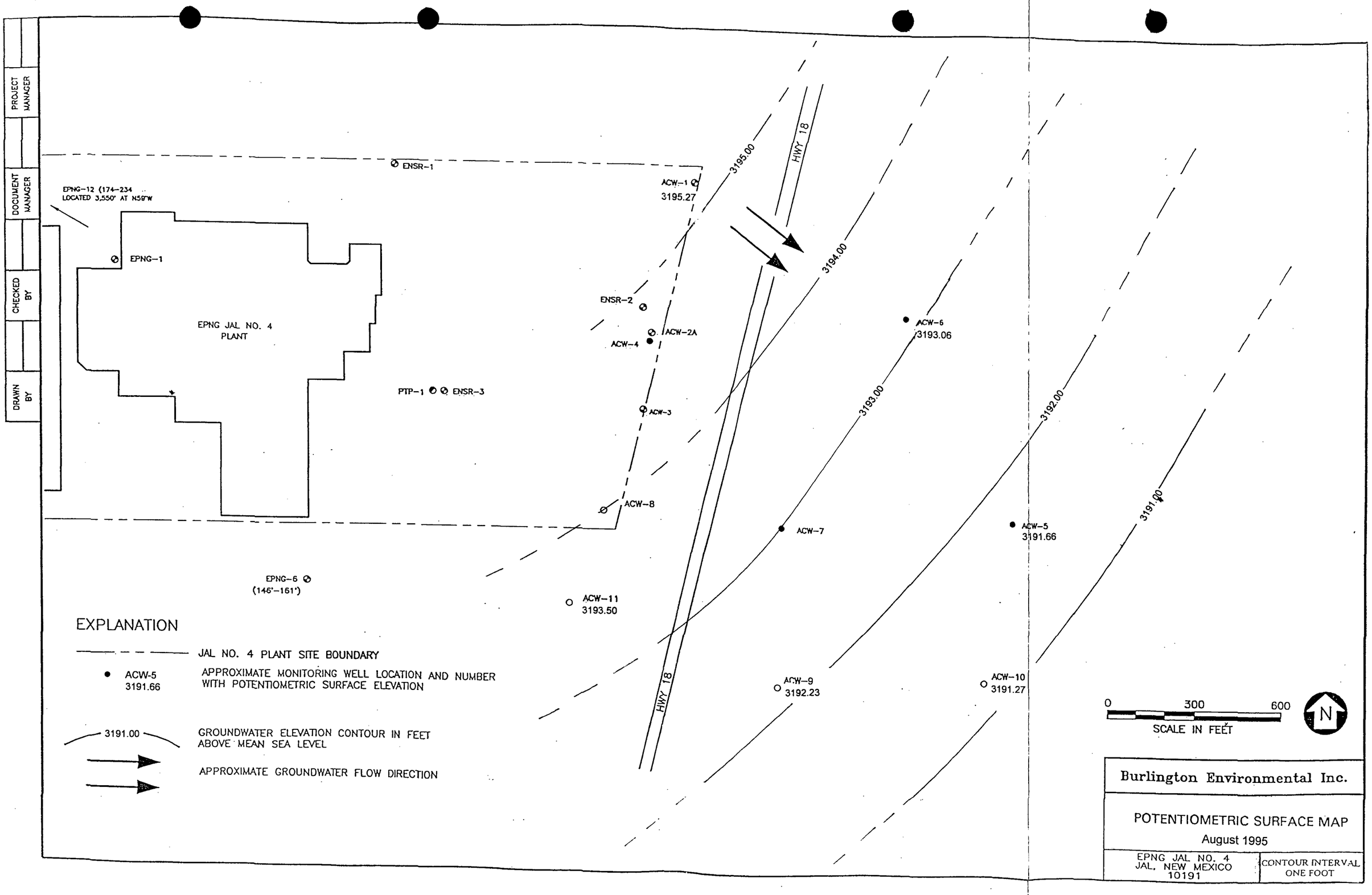
cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																					
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																					
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																					
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																					
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																					
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.88	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33
6/27/95	S95-0383	Monitor Well ACW #01	6700	8400	1400	8.4	22	<2.0	0.95	74	<0.025	0.59	92	0.077	15	3200	<0.02	4.6	4.6	<2.5	140	710	510	1.9	260	35
8/29/95	S95-0448	Monitor Well ACW #01	3300	12000	21000	8.2	18	<20	0.82	67	<0.025	0.18	78	0.069	11	2400	<0.02	6	<10	<5	<15	820	590	2.2	210	28
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																					
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																					
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																					
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																					
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																					
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																					
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																					
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.94	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57
6/27/95	S95-0380	Monitor Well ACW #05	460	2800	3800	7.3	<1.0	3.4	1	270	<0.025	0.34	40	0.02	6.9	530	<0.020	<2.5	<2.5	<2.5	<5.0	320	240	1.1	800	56
8/30/95	S95-0450	Monitor Well ACW #05	510	2700	3900	7.0	<10	<20	1.1	240	<0.025	<0.10	36	<0.015	8.7	550	<0.020	<5	<10	<5	<15	310	810	1	890	44
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																					
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																					
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																					
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																					
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																					
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																					
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.94	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48
6/27/95	S95-0379	Monitor Well ACW #06	3500	8600	10000	9.0	44	<2.0	1.1	64	<0.025	5.8	16	0.082	<5.0	3000	<0.080	14	<2.5	<2.5	<5.0	1500	130	1.8	110	44
8/29/95	S95-0449	Monitor Well ACW #06	3000	7100	12000	8.4	26	<20	0.85	42	<0.025	0.54	16	0.04	<5.0	2500	<0.020	7	<10	<5	<15	1500	200	1.8	110	42

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																					
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																					
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																					
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																					
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																					
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																					
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.41	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49
6/28/95	S95-0384	Monitor Well ACW #09	3500	6200	9100	7.0	<1.0	<2.0	0.44	770	<0.025	0.28	250	0.98	15	1000	<0.020	<2.5	<2.5	<2.5	<5.0	300	2700	1.9	360	51
8/30/95	S95-0419	Monitor Well ACW #09	2500	4500	7150	6.5	<10	<20	0.39	640	<0.025	0.19	220	0.86	14	880	<0.040	<5	<10	<5	<15	240	2000	1.5	370	43
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																					
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																					
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																					
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																					
10/28/94	S94-0751	Monitor Well ACW #10	800	1694	2592																					
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																					
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.28	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43
6/28/95	S95-0385	Monitor Well ACW #10	1900	2300	3100	7.3	<1.0	<2.0	0.25	280	<0.025	0.28	94	0.029	7.5	160	<0.020	<2.5	<2.5	<2.5	<5.0	190	1200	0.98	230	46
8/30/95	S95-0420	Monitor Well ACW #10	790	2200	3100	7.0	<10	<20	0.24	280	<0.025	<0.20	95	0.034	52	150	<0.040	<5	<10	<5	<15	180	1100	0.9	210	42
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																					
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																					
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																					
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																					
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																					
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																					
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																					
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.32	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42
6/27/95	S95-0381	Monitor Well ACW #11	6500	7000	11000	7.2	<1.0	<2.0	0.35	720	<0.025	0.29	270	0.2	16	980	<0.020	5.1	<2.5	<2.5	<5.0	210	2800	1.6	210	45
8/29/95	S95-0447	Monitor Well ACW #11	3400	6000	10000	6.8	6.2	<2.0	0.29	550	<0.025	0.17	210	0.088	16	880	<0.020	8	<10	<5	<15	220	2700	2.2	220	44


PROJECT MANAGER
DOCUMENT MANAGER
CHECKED BY
DRAWN BY
ENSR-1
EPNG-12 (174-234
LOCATED 3,550' AT N59°W
EPNG-1
EPNG JAL NO. 4
PLANT
PTP-1
ENSR-3
ENSR-2
ACW-1
3195.27
ACW-2A
ACW-4
ACW-3
ACW-8
ACW-7
ACW-6
3193.06
ACW-5
3191.66
ACW-11
3193.50
ACW-9
3192.23
ACW-10
3191.27
EPNG-6
(146'-161')
3195.00
3194.00
3193.00
3192.00
3191.00
HWY 18
HWY 18
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-5
3191.66
APPROXIMATE MONITORING WELL LOCATION AND NUMBER
WITH POTENTIOMETRIC SURFACE ELEVATION
3191.00
GROUNDWATER ELEVATION CONTOUR IN FEET
ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
600
SCALE IN FEET
N
Burlington Environmental Inc.
POTENTIOMETRIC SURFACE MAP
August 1995
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
CONTOUR INTERVAL
ONE FOOT

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505

August 10, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-388

Mr. Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

RE: GROUND WATER REMEDIATION/INVESTIGATION
JAL NO. 4 GAS PLANT
LEA COUNTY, NEW MEXICO

Dear Mr. Garibay:

The New Mexico Oil Conservation Division (OCD) has completed a review of El Paso Natural Gas Company's (EPNG) June 28, 1995 "GROUND WATER REMEDIATION/INVESTIGATION, PROJECT WORK PLAN REVISIONS, EPNG JAL NO.4, LEA COUNTY, NEW MEXICO". This document contains a revision of EPNG's February 1995 monitor well installation work plan for additional definition of the extent of ground water contamination at the site.

The above referenced work plan is approved with the following conditions:

1. All monitor wells will be constructed as set out below:

   a. An appropriately sized gravel pack will be set around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

   b. A 2-3 foot bentonite plug will be placed above the gravel pack.

   c. The remainder of the hole will be sealed with cement containing 5 % bentonite.

2. EPNG will develop each well upon completion using EPA approved procedures.

3. Ground water from the monitor wells will be sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX), major cations and anions, heavy metals and polynuclear aromatic hydrocarbons using EPA approved methods.

4. EPNG will submit a report on the investigation to the OCD by November 3, 1995. The report will contain:

   a. A description of all activities which occurred during the investigation, conclusions and recommendations.

   b. A summary of the laboratory analytic results of water quality sampling of the monitor wells.

   c. A water table elevation map using the water table elevation of the ground water in all monitor wells.

   d. A geologic log and as built well completion diagram for each well.

5. EPNG will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and or split samples.

6. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

The OCD would like to note that the cleanup standards for ground water at the site include other contaminants that exceed New Mexico Water Quality Control Commission ground water standards such as BTEX.

Please be advised that OCD approval does not relieve EPNG of liability should the investigation activities determine that contamination exists which is beyond the scope of the work plan, or, if the activities fail to adequately determine the extent of contamination related to EPNG's activities. In addition, OCD approval does not relieve EPNG of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price , OCD Hobbs Office

Z 765 962 388

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Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
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PS Form **3800**, March 1993

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El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

June 30, 1995

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
Second Quarter Report

Dear Mr. Olson:

A summary of current and historical water quality analytical results for monitor wells ACW-1, ACW-5, ACW-6, ACW-9, ACW-10, ACW-11 and a current water table elevation map are attached. The analytical laboratory allowed the BTEX analysis holding time to expire; consequently, monitoring well resampling was necessary. The BTEX analytical results will be submitted for your review, once they become available.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay

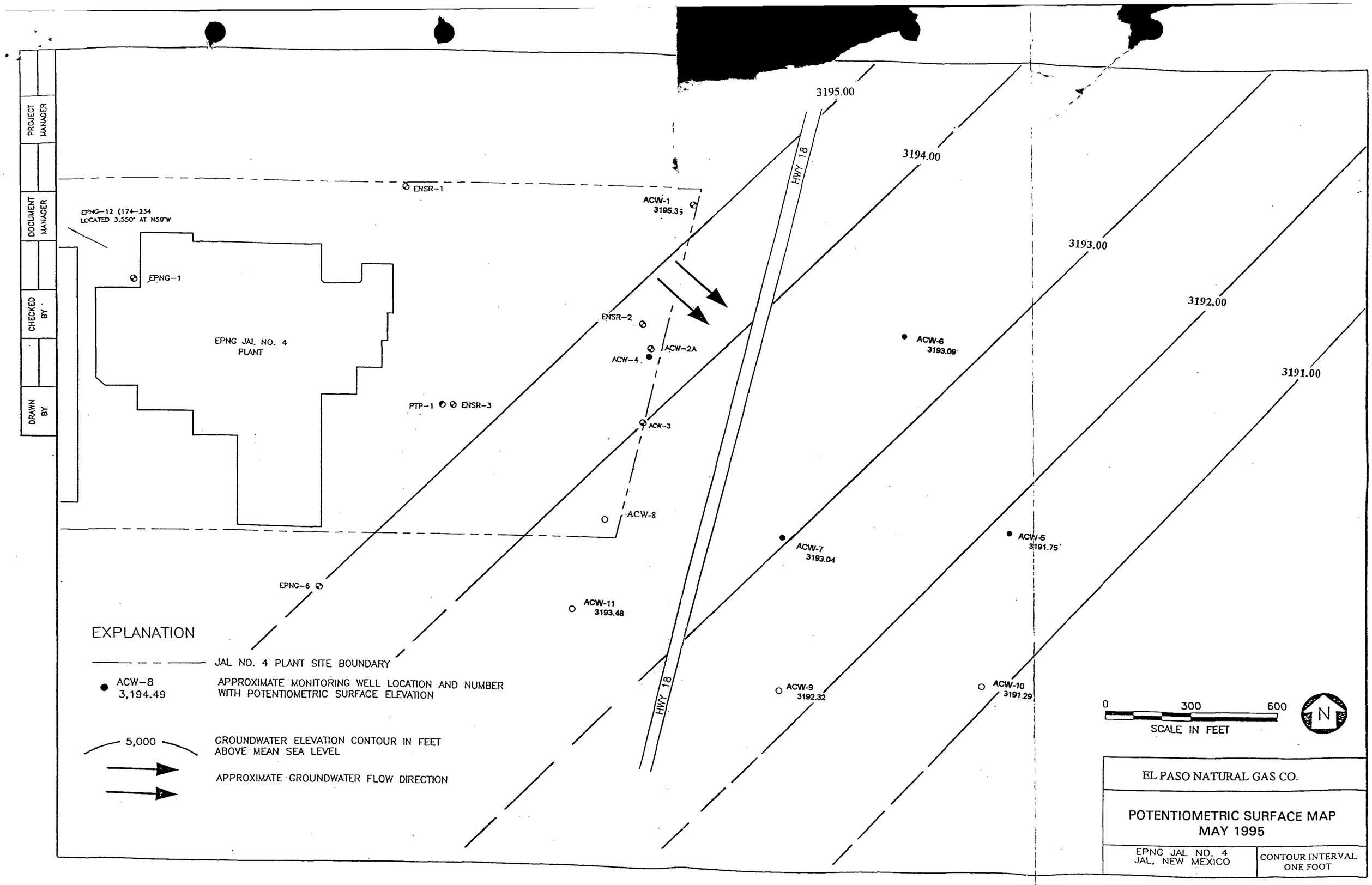
Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	Chloride mg/l	Residue, Filterable (TDS) mg/l	Specific Conductance umho/cm	pH	Fluoride mg/l	Nitrate mg/l	Boron mg/l	Calcium mg/l	Copper mg/l	Iron mg/l	Magnesium mg/l	Manganese mg/l	Potassium mg/l	Sodium mg/l	Zinc mg/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Total Xylene ug/l	Alkalinity (as CaCO3) mg/l	Hardness (as CaCO3) mg/l	Bromide mg/l	Sulfate mg/l	Silica mg/l	Potassium mg/l
3/5/93	S93-0100	Monitor Well ACW #01	4045	8505	14350																						
9/15/93	S93-0531	Monitor Well ACW #01	2915	6016	10360																						
11/10/93	S93-0683	Monitor Well ACW #01	3683	7340	11780																						
4/20/94	S94-0377	Monitor Well ACW #01	5400	8430	16520																						
10/27/94	S94-0717	Monitor Well ACW #01	3700	8440	14630																						
5/16/95	S95-0231	Monitor Well ACW #01	4100	8200	14000	8.3	25	<2.0	0.88	66	<0.025	0.38	72	0.062	12	2600	<0.020	<5	<10	<5	0	700	470	1.8	240	33	10
3/10/93	S93-0114	Monitor Well ACW #05	2544	6110	10400																						
6/17/93	S93-0387	Monitor Well ACW #05	1228	323	4480																						
9/16/93	S93-0536	Monitor Well ACW #05	650	3064	4140																						
11/9/93	S93-0678	Monitor Well ACW #05	720	3202	4390																						
4/21/94	S94-0385	Monitor Well ACW #05	800	3300	4131																						
10/28/94	S94-0749	Monitor Well ACW #05	550	3112	4500																						
1/31/95	S95-0015	Monitor Well ACW #05	499	2848	4050																						
5/16/95	S95-0229	Monitor Well ACW #05	530	2800	3900	7.0	<1.0	3.5	0.94	270	<0.025	0.46	39	0.026	6.6	540	<0.020	<5	<10	<5	0	320	980	1.3	1100	57	6.9
6/18/93	S93-0388	Monitor Well ACW #06	2108	5027	8220																						
9/16/93	S93-0537	Monitor Well ACW #06	2737	6656	11130																						
11/8/93	S93-0677	Monitor Well ACW #06	2154	5646	8540																						
4/21/94	S94-0384	Monitor Well ACW #06	3600	6930	11080																						
10/28/94	S94-0750	Monitor Well ACW #06	2100	6910	11988																						
1/31/95	S95-0016	Monitor Well ACW #06	2873	6755	11530																						
5/16/95	S95-0230	Monitor Well ACW #06	2800	6400	10000	8.1	31	<2.0	0.94	70	<0.025	3.9	19	0.079	<5.0	2200	<0.020	<5	<10	<5	0	1300	200	1.4	110	48	3.1
6/17/93	S93-0391	Monitor Well ACW #09	2288	4435	5900																						
9/14/93	S93-0525	Monitor Well ACW #09	915	2119	3100																						
11/9/93	S93-0679	Monitor Well ACW #09	1184	2300	3670																						
4/22/94	S94-0387	Monitor Well ACW #09	1150	2508	3900																						
12/1/94	S94-0795	Monitor Well ACW #09	1650	3510	5450																						
1/31/95	S95-0017	Monitor Well ACW #09	2083	4240	7110																						
5/17/95	S95-0233	Monitor Well ACW #09	5600	6800	11000	6.6	<1.0	<2.0	0.41	820	<0.025	0.17	280	1	16	910	0.025	<5	22	<5	0	320	4500	2.1	440	49	17
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061																						
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349																						
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800																						
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440																						
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592																						
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660																						
5/17/95	S95-0234	Monitor Well ACW #10	1600	2300	3900	6.9	<1.0	1.1	0.28	320	<0.025	0.12	110	0.037	8	170	<0.020	<5	<10	<5	0	190	1300	1.1	300	43	8.9
8/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000																						
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570																						
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160																						
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290																						
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060																						
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550																						
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200																						
5/17/95	S95-0235	Monitor Well ACW #11	4400	7200	12000	6.8	<1.0	<2.0	0.32	740	<0.025	0.36	260	0.23	16	1200	<0.020	<5	<10	<5	0	230	3300	1.9	250	42	17


PROJECT MANAGER
DOCUMENT MANAGER
CHECKED BY
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3195.00
3194.00
3193.00
3192.00
3191.00
HWY 18
ENSR-1
ACW-1
3195.35
EPNG-12 (174-234
LOCATED 3,550' AT N58°W
EPNG-1
EPNG JAL NO. 4
PLANT
ENSR-2
ACW-2A
ACW-4
ACW-6
3193.09
PTP-1
ENSR-3
ACW-3
ACW-8
ACW-7
3193.04
ACW-5
3191.75
EPNG-6
ACW-11
3193.48
ACW-9
3192.32
ACW-10
3191.29
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-8
3,194.49
APPROXIMATE MONITORING WELL LOCATION AND NUMBER
WITH POTENTIOMETRIC SURFACE ELEVATION
5,000
GROUNDWATER ELEVATION CONTOUR IN FEET
ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
600
SCALE IN FEET
N
EL PASO NATURAL GAS CO.
POTENTIOMETRIC SURFACE MAP
MAY 1995
EPNG JAL NO. 4
JAL, NEW MEXICO
CONTOUR INTERVAL
ONE FOOT

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

June 28, 1995

RECEIVED
JUN 30 1995

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Ground Water Remediation/Investigation
Project Work Plan Revisions
EPNG Jal No. 4
Lea County, New Mexico

Dear Mr. Olson:

A project work plan was submitted for your review on February 1995. In a letter dated April 27, NMOCD requested a revised work plan be submitted by July 1, 1995.

The following work plan revisions were mutually agreed to during a meeting held in NMOCD's office on June 1.

1) Three additional monitoring wells will be installed. The wells will be approximately 170 feet deep with 20 feet of screen. The attached map identifies the approximate new well locations.

2) The previously proposed well cluster will not be installed.

3) Clean up standards will be:

TDS	1000 ppm
Chloride	250 ppm

4) The NMOCD Santa Fe office will be notified at least one week in advance of all scheduled sampling, drilling, or pumping activities.

5) Supply wells will be resampled.

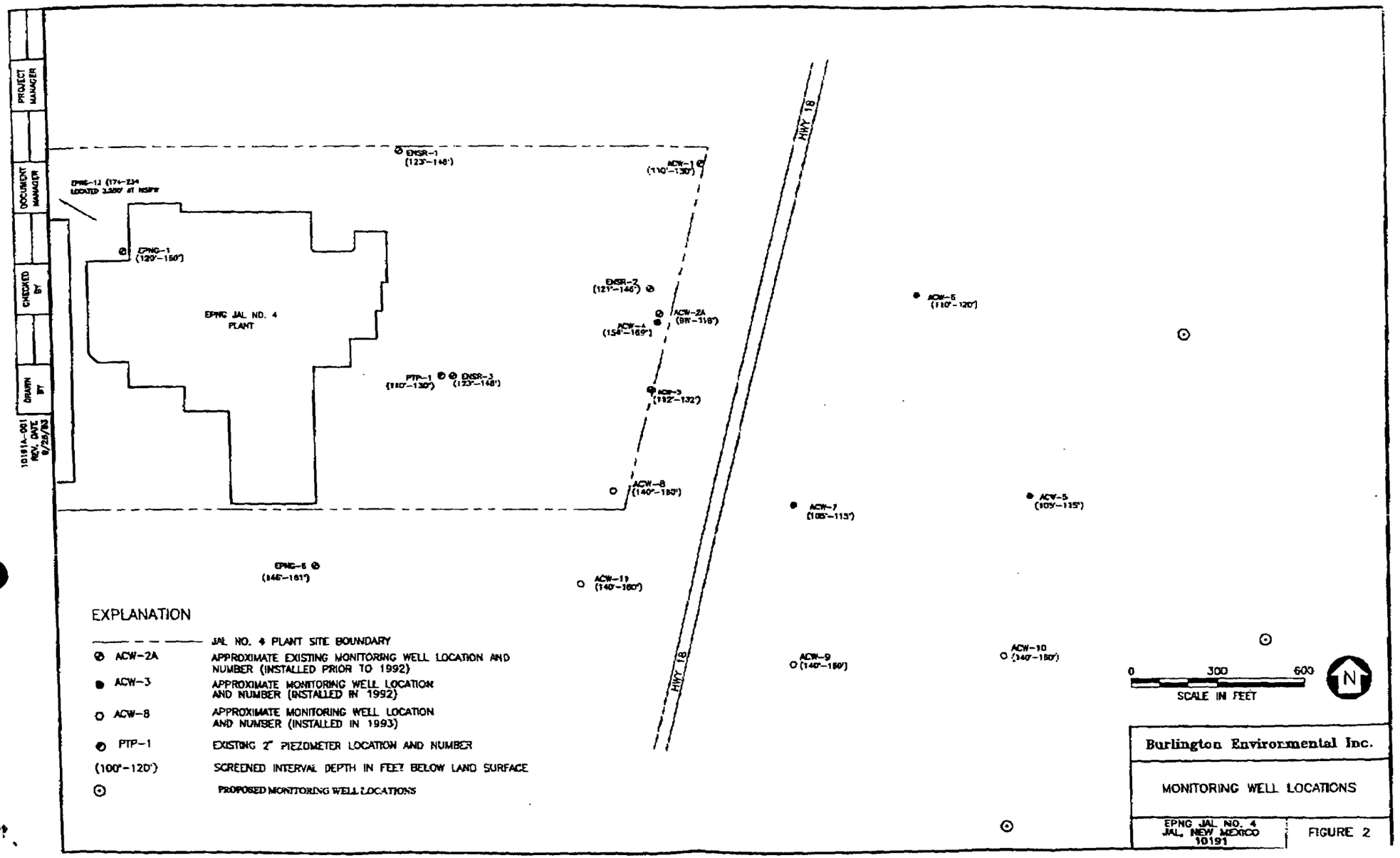
If you have any questions or need additional information, please contact me at (915) 541-3242 or Tom Martinez at (915) 686-3226.

Sincerely,

Gerry Garibay

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240


PROJECT MANAGER
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10191A-001 REV. DATE 8/25/93
EPNG JAL NO. 4 PLANT
EPNG-1 (120'-150')
EPNG-12 (174-234 LOCATED 3,380' at NSPR
EPNG-6 (145'-161')
ENSR-1 (123'-148')
ENSR-2 (121'-146')
ENSR-3 (123'-148')
PTP-1 (110'-130')
ACW-1 (110'-130')
ACW-2A (98'-118')
ACW-4 (154'-169')
ACW-3 (112'-132')
ACW-8 (140'-160')
ACW-11 (140'-160')
ACW-6 (110'-120')
ACW-7 (105'-115')
ACW-5 (105'-115')
ACW-9 (140'-160')
ACW-10 (140'-160')
HWY 18
HWY 18
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3 APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8 APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1 EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120') SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
PROPOSED MONITORING WELL LOCATIONS
0 300 600
SCALE IN FEET
N
Burlington Environmental Inc.
MONITORING WELL LOCATIONS
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
FIGURE 2

6/1/95 OCD/EPNG Meeting 10:30 am

attendees - Bill Olson OCD
- Tom Hutchins - EPNG
- Gerry Garibay - "
- Nancy Prince - "

Jal #4 (see handouts)

discussed MW locations
install 3 MW's instead of nested set proposed

oil well recently installed adjacent to ACW-11,
big jump in Cl^- in recent sampling

remediation system not yet operational

San Juan Plant

Discuss MW's

Want to recontour old pit site
Should be OK but,
Need to characterize soils in pit bottom prior to closure

They will submit plan

NEW MEXICO OIL CONSERVATION DIVISION
MEETING AGENDA
June 1, 1995
10:00 AM

Jal No. 4

A. Latest groundwater monitoring data discussion.
B. Nested wells.
C. Future monitoring well screen intervals.
D. Proposed monitoring well locations.
E. Cleanup goals.
F. Work plan revisions.
G. Recovery well piping.

Jal Laboratory

A. Latest groundwater monitoring data discussion.
B. Evaluate semi-annual monitoring.

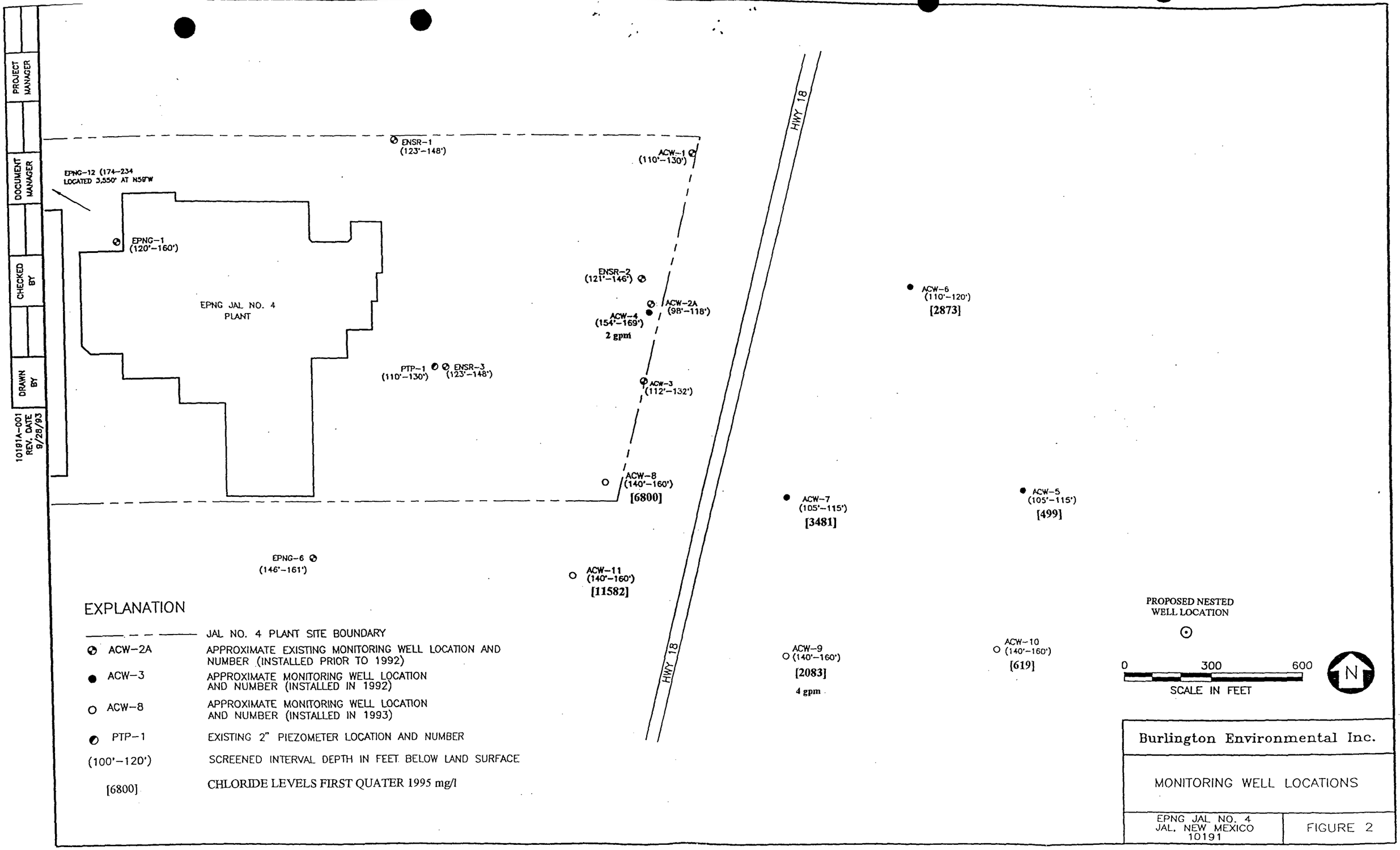
San Juan River Plant

A. Latest groundwater monitoring data.
B. Proposed well abandonments.
C. Need for hydrocarbon source identification/remediation.
D. Review of soil data and past proposals.
E. Plan to level ponds and cover.
F. Work Plan schedule.

Lunch

J[illegible]#4 MONITORING WELL ANALYTICAL D[illegible]A

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	CHLORIDE mg/l	RESIDUE, FILTERABLE (TDS) mg/l	SPECIFIC CONDUCTANCE (umho) mg/l
3/5/93	S93-0100	Monitor Well ACW #1	4045	8505	14350
9/15/93	S93-0531	Monitor Well ACW #1	2915	6016	10360
9/15/93	S93-0532	Monitor Well ACW #1 DUP	2924	6032	10360
11/10/93	S93-0683	Monitor Well ACW #1	3683	7340	11780
11/10/93	S93-0684	Monitor Well ACW #1 DUP	5653	11080	18100
4/20/94	S94-0377	Monitor Well ACW #1	5400	8430	16520
10/27/94	S94-0717	Monitor Well ACW #1	3700	8440	14630
3/10/93	S93-0114	Monitor Well ACW #5	2544	6110	10400
6/17/93	S93-0387	Monitor Well ACW #5	1228	323	4480
9/16/93	S93-0536	Monitor Well ACW #5	650	3064	4140
11/9/93	S93-0678	Monitor Well ACW #5	720	3202	4390
4/21/94	S94-0385	Monitor Well ACW #5	800	3300	4131
10/28/94	S94-0749	Monitor Well ACW #5	550	3112	4500
1/31/95	S95-0015	Monitor Well ACW #5	499	2848	4050
6/18/93	S93-0388	Monitor Well ACW #6	2108	5027	8220
9/16/93	S93-0537	Monitor Well ACW #6	2737	6656	11130
11/8/93	S93-0677	Monitor Well ACW #6	2154	5646	8540
4/21/94	S94-0384	Monitor Well ACW #6	3600	6930	11080
10/28/94	S94-0750	Monitor Well ACW #6	2100	6910	11988
1/31/95	S95-0016	Monitor Well ACW #6	2873	6755	11530
6/17/93	S93-0391	Monitor Well ACW #9	2288	4435	5900
9/14/93	S93-0525	Monitor Well ACW #9	915	2119	3100
11/9/93	S93-0679	Monitor Well ACW #9	1184	2300	3670
4/22/94	S94-0387	Monitor Well ACW #9	1150	2508	3900
12/1/94	S94-0795	Monitor Well ACW #9	1650	3510	5450
12/1/94	S94-0796	Monitor Well ACW #9 Dup.	1800	4100	5970
1/31/95	S95-0017	Monitor Well ACW #9	2083	4240	7110
1/31/95	S95-0018	Monitor Well ACW #9 Dup.	1776	3552	6330
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440
4/22/94	S94-0389	Monitor Well ACW #10 DUP	600	1564	2400
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200


PROJECT MANAGER
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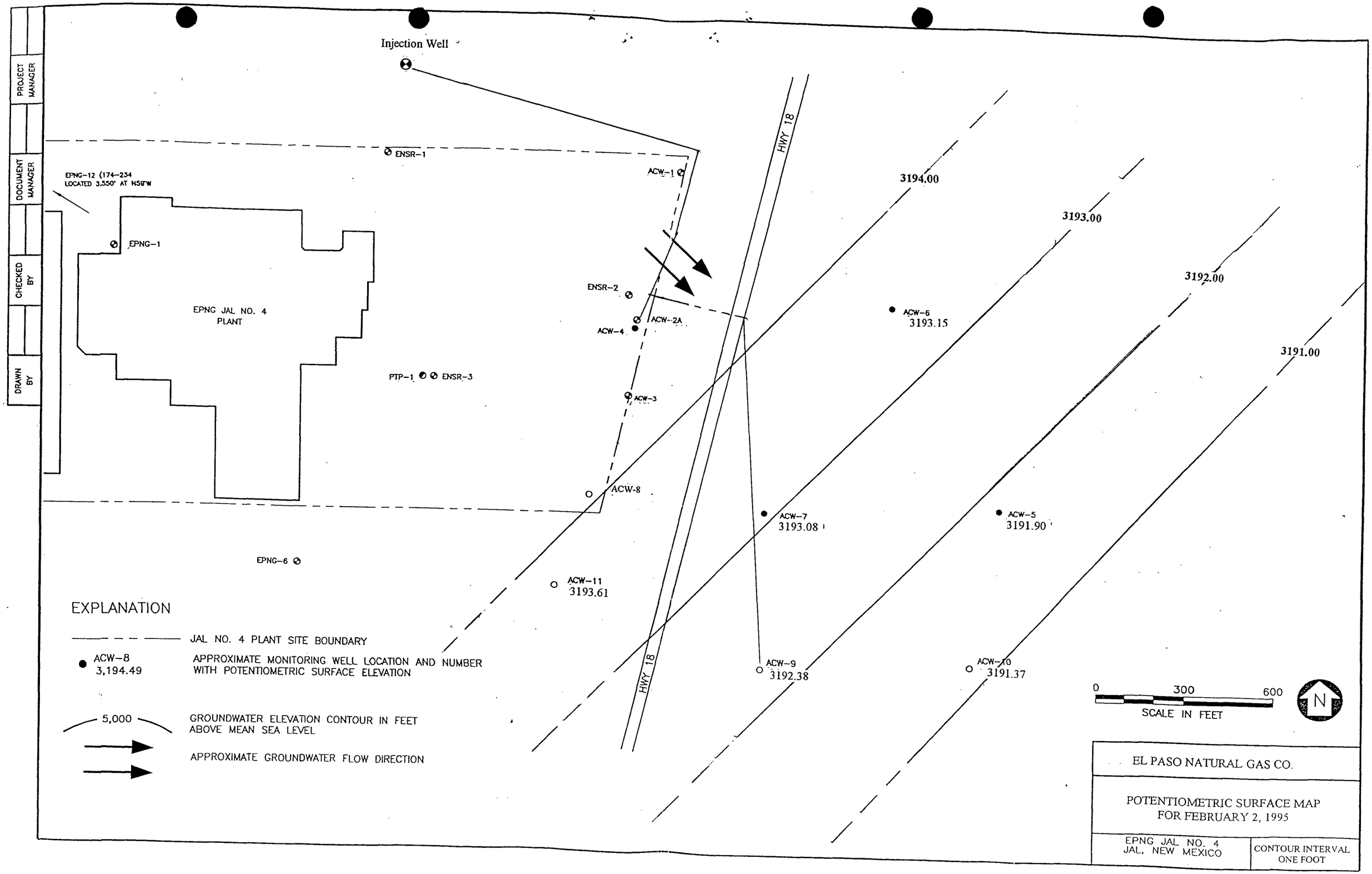
DRAWN BY
10191A-001
REV. DATE
9/28/93
EPNG-12 (174-234
LOCATED 3,550' AT N58°W
EPNG-1
(120'-160')
EPNG JAL NO. 4
PLANT
ENSR-1
(123'-148')
ACW-1
(110'-130')
ENSR-2
(121'-146')
ACW-2A
(98'-118')
ACW-4
(154'-169')
2 gpm
PTP-1
(110'-130')
ENSR-3
(123'-148')
ACW-3
(112'-132')
ACW-8
(140'-160')
[6800]
EPNG-6
(146'-161')
ACW-11
(140'-160')
[11582]
HWY 18
HWY 18
ACW-6
(110'-120')
[2873]
ACW-7
(105'-115')
[3481]
ACW-5
(105'-115')
[499]
ACW-9
(140'-160')
[2083]
4 gpm
ACW-10
(140'-160')
[619]
PROPOSED NESTED
WELL LOCATION
0
300
600
SCALE IN FEET
N
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A
APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1
EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120')
SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
[6800]
CHLORIDE LEVELS FIRST QUATER 1995 mg/l
Burlington Environmental Inc.
MONITORING WELL LOCATIONS
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
FIGURE 2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Injection Well
ENSR-1
EPNG-12 (174-234
LOCATED 3,550' AT N59°W
EPNG-1
EPNG JAL NO. 4
PLANT
ACW-1
ENSR-2
ACW-2A
ACW-4
PTP-1
ENSR-3
ACW-3
ACW-8
EPNG-6
ACW-11
3193.61
HWY 18
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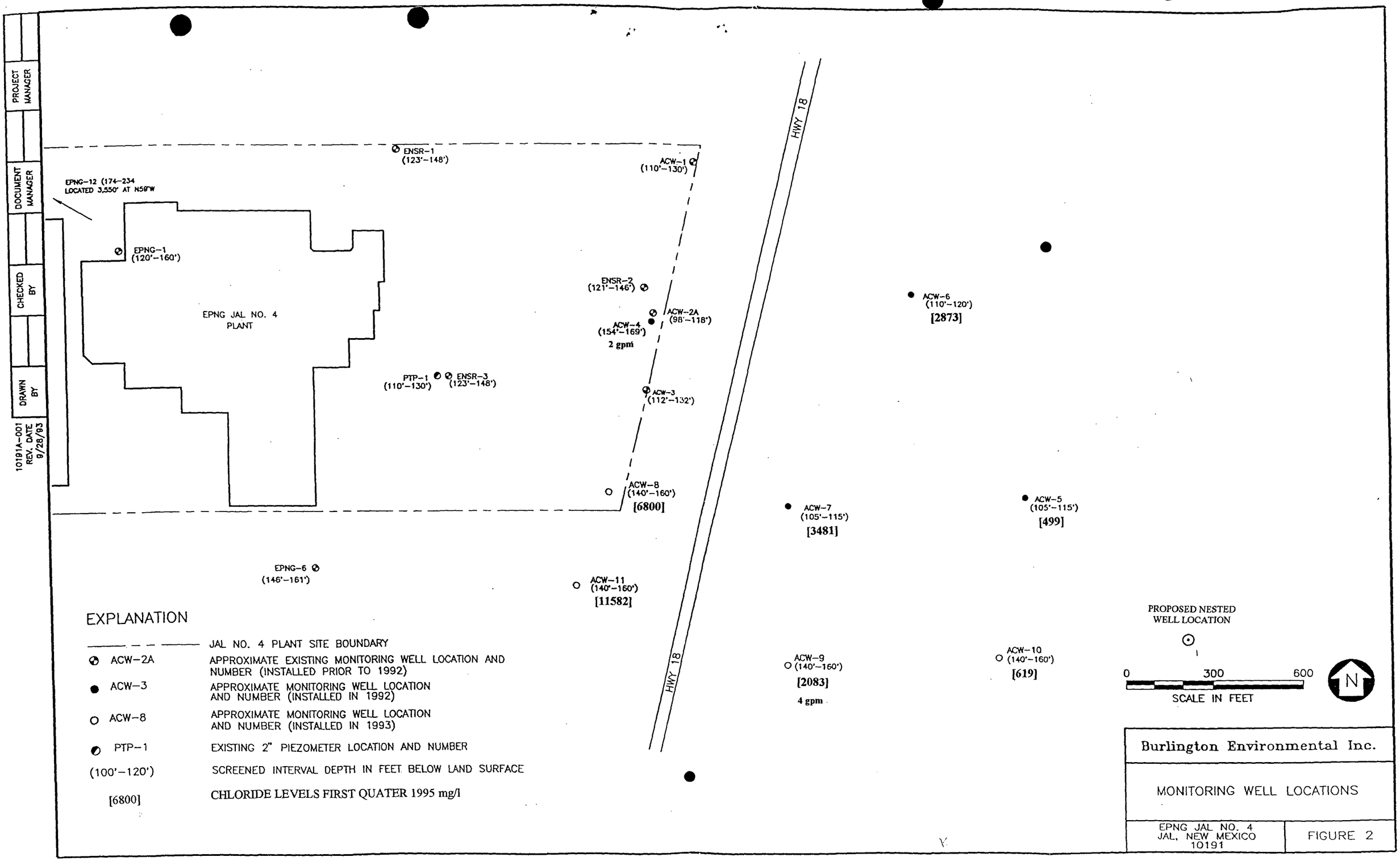
3193.00
3192.00
3191.00
ACW-6
3193.15
ACW-7
3193.08
ACW-5
3191.90
ACW-9
3192.38
ACW-10
3191.37
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-8
3,194.49
APPROXIMATE MONITORING WELL LOCATION AND NUMBER
WITH POTENTIOMETRIC SURFACE ELEVATION
5,000
GROUNDWATER ELEVATION CONTOUR IN FEET
ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
600
SCALE IN FEET
N
EL PASO NATURAL GAS CO.
POTENTIOMETRIC SURFACE MAP
FOR FEBRUARY 2, 1995
EPNG JAL NO. 4
JAL, NEW MEXICO
CONTOUR INTERVAL
ONE FOOT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DOCUMENT MANAGER
CHECKED BY
DRAWN BY
10191A-001
REV. DATE
9/28/93
ENSR-1
(123'-148')
ACW-1
(110'-130')
EPNG-12 (174-234
LOCATED 3,550' AT N59°W
EPNG-1
(120'-160')
EPNG JAL NO. 4
PLANT
ENSR-2
(121'-146')
ACW-2A
(98'-118')
ACW-4
(154'-169')
2 gpm
ACW-6
(110'-120')
[2873]
PTP-1
(110'-130')
ENSR-3
(123'-148')
ACW-3
(112'-132')
ACW-8
(140'-160')
[6800]
ACW-7
(105'-115')
[3481]
ACW-5
(105'-115')
[499]
EPNG-6
(146'-161')
ACW-11
(140'-160')
[11582]
HWY 18
HWY 18
ACW-9
(140'-160')
[2083]
4 gpm
ACW-10
(140'-160')
[619]
PROPOSED NESTED
WELL LOCATION
0
300
600
SCALE IN FEET
N
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-2A
APPROXIMATE EXISTING MONITORING WELL LOCATION AND NUMBER (INSTALLED PRIOR TO 1992)
ACW-3
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1992)
ACW-8
APPROXIMATE MONITORING WELL LOCATION AND NUMBER (INSTALLED IN 1993)
PTP-1
EXISTING 2" PIEZOMETER LOCATION AND NUMBER
(100'-120')
SCREENED INTERVAL DEPTH IN FEET BELOW LAND SURFACE
[6800]
CHLORIDE LEVELS FIRST QUATER 1995 mg/l
Burlington Environmental Inc.
MONITORING WELL LOCATIONS
EPNG JAL NO. 4
JAL, NEW MEXICO
10191
FIGURE 2

JAL #4 MONITOR WELL

5/24/95

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	CHLORIDE mg/l	RESIDUE, FILTERABLE (TDS) mg/l	SPECIFIC CONDUCTANCE (umho) mg/l
3/5/93	S93-0100	Monitor Well ACW #1	4045	8505	14350
9/15/93	S93-0531	Monitor Well ACW #1	2915	6016	10360
9/15/93	S93-0532	Monitor Well ACW #1 DUP	2924	6032	10360
11/10/93	S93-0683	Monitor Well ACW #1	3683	7340	11780
11/10/93	S93-0684	Monitor Well ACW #1 DUP	5653	11080	18100
4/20/94	S94-0377	Monitor Well ACW #1	5400	8430	16520
10/27/94	S94-0717	Monitor Well ACW #1	3700	8440	14630
3/4/93	S93-0107	Monitor Well ENSR #1	3994	8730	15210
9/14/93	S93-0527	Monitor Well ENSR #1	3419	6572	11530
11/10/93	S93-0686	Monitor Well ENSR #1	2723	5680	8890
4/20/94	S94-0379	Monitor Well ENSR #1	800	1834	3060
4/20/94	S94-0380	Monitor Well ENSR #1 DUP	1400	2964	4930
10/27/94	S94-0718	Monitor Well ENSR #1	1300	5570	9960
3/4/93	S93-0106	Monitor Well PTP #1	675	1565	2630
9/14/93	S93-0529	Monitor Well PTP #1	570	1509	2320
11/10/93	S93-0688	Monitor Well PTP #1	563	1406	2310
4/25/94	S94-0393	Monitor Well PTP #1	650	1528	2490
10/27/94	S94-0723	Monitor Well PTP #1	650	1764	3000
6/17/93	S93-0384	Production Well #1	78	441	754
3/5/93	S93-0101	Monitor Well ACW #2A	9678	19655	30400
10/3/93	S93-0623	Monitor Well ACW #2A	10102	18130	28300
12/11/93	S93-0776	Monitor Well ACW #2A	11203	21010	31100
4/20/94	S94-0374	Monitor Well ACW #2A	9000	16900	28600
10/27/94	S94-0715	Monitor Well ACW #2A	4000	19000	31800
3/5/93	S93-0108	Monitor Well ENSR #2	14357	26170	14357
6/17/93	S93-0385	Monitor Well ENSR #2	8640	19280	30000
9/14/93	S93-0530	Monitor Well ENSR #2	9460	17940	28800
9/14/93	S93-0530	Monitor Well ENSR #2	9460	17940	28800
11/10/93	S93-0685	Monitor Well ENSR #2	12420	23338	31900
4/20/94	S94-0376	Monitor Well ENSR #2	4600	8620	14900
10/27/94	S94-0716	Monitor Well ENSR #2	4000	9100	16180
3/5/93	S93-0102	Monitor Well ACW #3	6102	12735	21300
10/3/93	S93-0621	Monitor Well ACW #3	14278	25095	37400
12/11/93	S93-0775	Monitor Well ACW #3	10281	16810	25900
4/20/94	S94-0375	Monitor Well ACW #3	6800	8360	20200
10/26/94	S94-0712	Monitor Well ACW #3	5000	11720	20720
3/4/93	S93-0109	Monitor Well ENSR #3	737	1645	2690
9/14/93	S93-0528	Monitor Well ENSR #3	477	1443	2060
11/10/93	S93-0687	Monitor Well ENSR #3	585	1400	2190
4/21/94	S94-0381	Monitor Well ENSR #3	260	960	1430

JAL #4 MONITOR WELL

5/24/95

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	CHLORIDE mg/l	RESIDUE, FILTERABLE (TDS) mg/l	SPECIFIC CONDUCTANCE (umho) mg/l
3/4/93	S93-0103	Monitor Well ACW #4	38480	65985	84700
6/17/93	S93-0386	Monitor Well ACW #4	35194	65100	82300
10/3/93	S93-0622	Monitor Well ACW #4	40717	68816	88800
12/11/93	S93-0778	Monitor Well ACW #4	29071	50620	66100
4/19/94	S94-0373	Monitor Well ACW #4	54000	79400	108600
10/26/94	S94-0713	Monitor Well ACW #4	11000	21800	34800
3/10/93	S93-0114	Monitor Well ACW #5	2544	6110	10400
6/17/93	S93-0387	Monitor Well ACW #5	1228	323	4480
9/16/93	S93-0536	Monitor Well ACW #5	650	3064	4140
11/9/93	S93-0678	Monitor Well ACW #5	720	3202	4390
4/21/94	S94-0385	Monitor Well ACW #5	800	3300	4131
10/28/94	S94-0749	Monitor Well ACW #5	550	3112	4500
1/31/95	S95-0015	Monitor Well ACW #5	499	2848	4050
6/18/93	S93-0388	Monitor Well ACW #6	2108	5027	8220
9/16/93	S93-0537	Monitor Well ACW #6	2737	6656	11130
11/8/93	S93-0677	Monitor Well ACW #6	2154	5646	8540
4/21/94	S94-0384	Monitor Well ACW #6	3600	6930	11080
10/28/94	S94-0750	Monitor Well ACW #6	2100	6910	11988
1/31/95	S95-0016	Monitor Well ACW #6	2873	6755	11530
3/5/93	S93-0105	Monitor Well ACW #7	3196	6045	10900
6/18/93	S93-0389	Monitor Well ACW #7	7493	14310	232000
9/15/93	S93-0535	Monitor Well ACW #7	3152	6248	10700
11/8/93	S93-0676	Monitor Well ACW #7	2736	5790	8700
4/21/94	S94-0383	Monitor Well ACW #7	3500	6580	10870
10/27/94	S94-0748	Monitor Well ACW #7	4000	6930	12260
1/31/95	S95-0014	Monitor Well ACW #7	3481	7090	11820
6/16/93	S93-0390	Monitor Well ACW #8	10995	22387	34200
9/15/93	S93-0533	Monitor Well ACW #8	5067	14920	21300
11/9/93	S93-0682	Monitor Well ACW #8	11790	21168	30100
4/20/94	S94-0378	Monitor Well ACW #8	6400	8760	15260
10/27/94	S94-0719	Monitor Well ACW #8	6800	14675	23770
6/17/93	S93-0391	Monitor Well ACW #9	2288	4435	5900
9/14/93	S93-0525	Monitor Well ACW #9	915	2119	3100
11/9/93	S93-0679	Monitor Well ACW #9	1184	2300	3670
4/22/94	S94-0387	Monitor Well ACW #9	1150	2508	3900
12/1/94	S94-0795	Monitor Well ACW #9	1650	3510	5450
12/1/94	S94-0796	Monitor Well ACW #9 Dup.	1800	4100	5970
1/31/95	S95-0017	Monitor Well ACW #9	2083	4240	7110
1/31/95	S95-0018	Monitor Well ACW #9 Dup.	1776	3552	6330
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800

JAL #4 MONITOR WELL

5/24/95

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	CHLORIDE mg/l	RESIDUE, FILTERABLE (TDS) mg/l	SPECIFIC CONDUCTANCE (umho) mg/l
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440
4/22/94	S94-0389	Monitor Well ACW #10 DUP	600	1564	2400
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660
6/19/93	S93-0393	Monitor Well ACW #11	9737	18670	25000
9/15/93	S93-0534	Monitor Well ACW #11	3437	6820	10570
11/9/93	S93-0681	Monitor Well ACW #11	3620	6592	10160
4/21/94	S94-0382	Monitor Well ACW #11	6400	9520	16290
10/27/94	S94-0720	Monitor Well ACW #11	6200	13280	20060
10/27/94	S94-0721	Monitor Well ACW #11	6600	12900	20550
2/1/95	S95-0020	Monitor Well ACW #11	11582	19880	32200

El Paso
Natural Gas Company

OIL CONSERVATION DIVISION
RECEIVED
95 MAY 4 AM 8 52

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

April 28, 1995

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4, Lea County New, Mexico
First Quarter Report

Dear Mr. Olson:

A summary of water quality analytical results for monitor wells ACW-5, ACW-6, ACW-9, ACW-10 and a water table elevation map are enclosed. The water samples were collected prior to the receipt of your January 12, 1995; as a result, BTEX was not included in the analytical parameters and water levels were not measured for all monitor wells, as requested. All of the requested ground water monitoring will be addressed during the second quarter sampling event.

If you have any questions or need additional information, please contact me at 915/541-5764 or Tom Hutchins at 915/541-3242.

Sincerely,

Gerry Garibay

Gerry Garibay
Senior Environmental Scientist
Environmental Affairs Department

Attachments

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

JAL #4 MONITOR WELL
ANALYTICAL RESULTS

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	CHLORIDE mg/l	RESIDUE, FILTERABLE (TDS) mg/l	SPECIFIC CONDUCTANCE (umho) mg/l	POTASSIUM ug/l
3/10/93	S93-0114	Monitor Well ACW #5	2544	6110	10400	NT
6/17/93	S93-0387	Monitor Well ACW #5	1228	323	4480	9,400
9/16/93	S93-0536	Monitor Well ACW #5	650	3064	4140	NT
11/9/93	S93-0678	Monitor Well ACW #5	720	3202	4390	NT
4/21/94	S94-0385	Monitor Well ACW #5	800	3300	4131	NT
10/28/94	S94-0749	Monitor Well ACW #5	550	3112	4500	NT
1/31/95	S95-0015	Monitor Well ACW #5	499	2848	4050	NT
6/18/93	S93-0388	Monitor Well ACW #6	2108	5027	8220	6,530
9/16/93	S93-0537	Monitor Well ACW #6	2737	6656	11130	NT
11/8/93	S93-0677	Monitor Well ACW #6	2154	5646	8540	NT
4/21/94	S94-0384	Monitor Well ACW #6	3600	6930	11080	NT
10/28/94	S94-0750	Monitor Well ACW #6	2100	6910	11988	NT
1/31/95	S95-0016	Monitor Well ACW #6	2873	6755	11530	NT
6/17/93	S93-0391	Monitor Well ACW #9	2288	4435	5900	12,500
9/14/93	S93-0525	Monitor Well ACW #9	915	2119	3100	NT
11/9/93	S93-0679	Monitor Well ACW #9	1184	2300	3670	NT
4/22/94	S94-0387	Monitor Well ACW #9	1150	2508	3900	NT
12/1/94	S94-0795	Monitor Well ACW #9	1650	3510	5450	NT
12/1/94	S94-0796	Monitor Well ACW #9 Dup.	1800	4100	5970	NT
1/31/95	S95-0017	Monitor Well ACW #9	2083	4240	7110	NT
1/31/95	S95-0018	Monitor Well ACW #9 Dup.	1776	3552	6330	NT
6/18/93	S93-0392	Monitor Well ACW #10	1027	701	1061	14,200
9/14/93	S93-0526	Monitor Well ACW #10	421	1190	1349	NT
11/9/93	S93-0680	Monitor Well ACW #10	420	1238	1800	NT
4/22/94	S94-0388	Monitor Well ACW #10	700	1638	2440	NT
4/22/94	S94-0389	Monitor Well ACW #10 DUP	600	1564	2400	NT
10/28/94	S94-0751	Monitor Well ACW #10	600	1694	2592	NT
2/1/95	S95-0019	Monitor Well ACW #10	619	1426	2660	NT

ND = NONDETECTABLE
NT = NOT TESTED FOR

JAL #4 MONITOR WELL
ANALYTICAL RESULTS

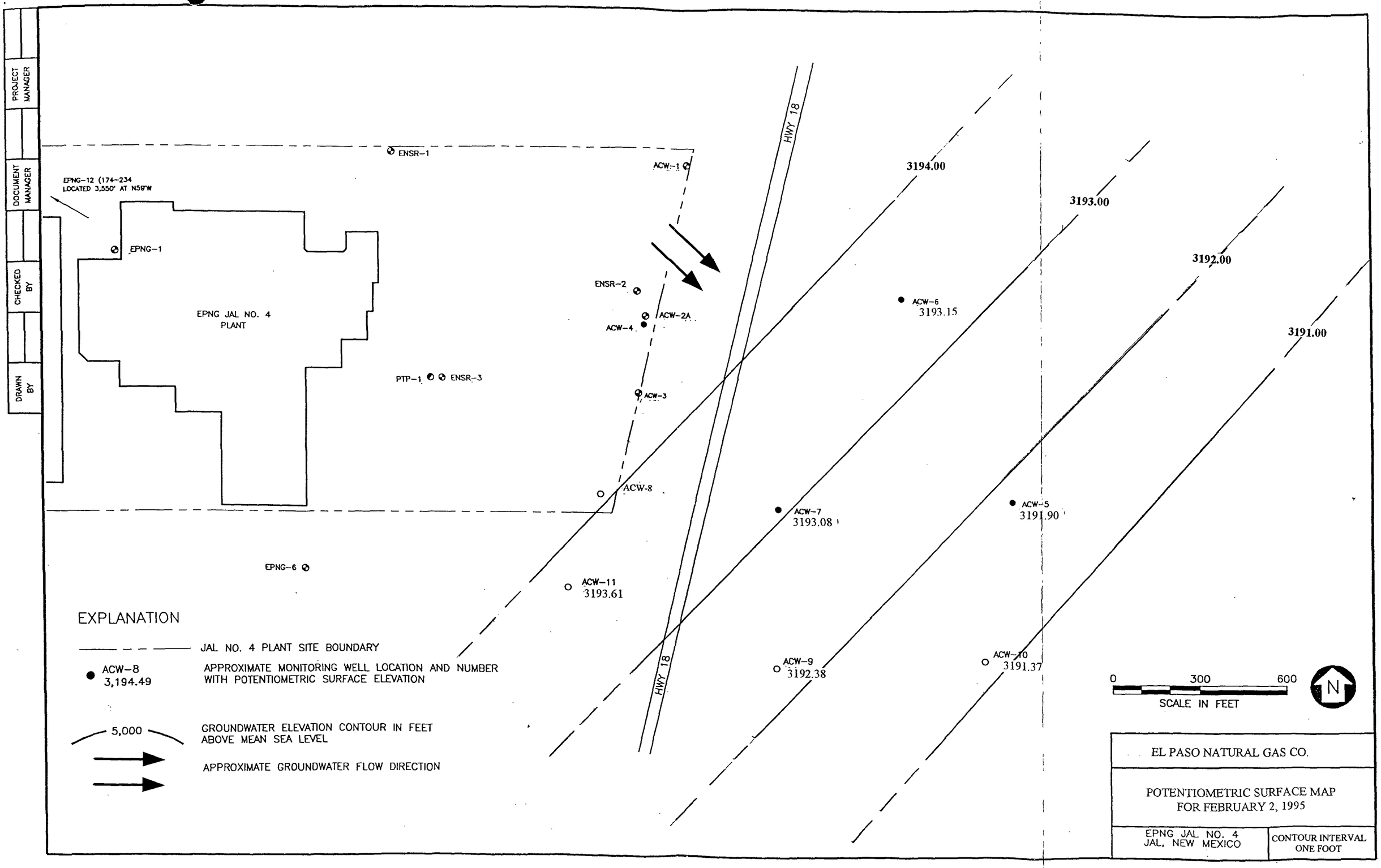
SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	SODIUM ug/l	FLUORIDE ug/l	SULFATE ug/l	NITRATE ug/l
3/10/93	S93-0114	Monitor Well ACW #5	NT	NT	NT	NT
6/17/93	S93-0387	Monitor Well ACW #5	513,000	ND	1,091	8.2
9/16/93	S93-0536	Monitor Well ACW #5	NT	NT	NT	NT
11/9/93	S93-0678	Monitor Well ACW #5	NT	NT	NT	NT
4/21/94	S94-0385	Monitor Well ACW #5	NT	NT	NT	NT
10/28/94	S94-0749	Monitor Well ACW #5	NT	NT	NT	NT
1/31/95	S95-0015	Monitor Well ACW #5	NT	NT	NT	NT
6/18/93	S93-0388	Monitor Well ACW #6	1,910,000	20.6	194	8.3
9/16/93	S93-0537	Monitor Well ACW #6	NT	NT	NT	NT
11/8/93	S93-0677	Monitor Well ACW #6	NT	NT	NT	NT
4/21/94	S94-0384	Monitor Well ACW #6	NT	NT	NT	NT
10/28/94	S94-0750	Monitor Well ACW #6	NT	NT	NT	NT
1/31/95	S95-0016	Monitor Well ACW #6	NT	NT	NT	NT
6/17/93	S93-0391	Monitor Well ACW #9	121,000	1.7	81	ND
9/14/93	S93-0525	Monitor Well ACW #9	NT	NT	NT	NT
11/9/93	S93-0679	Monitor Well ACW #9	NT	NT	NT	NT
4/22/94	S94-0387	Monitor Well ACW #9	NT	NT	NT	NT
12/1/94	S94-0795	Monitor Well ACW #9	NT	NT	NT	NT
12/1/94	S94-0796	Monitor Well ACW #9 Dup.	NT	NT	NT	NT
1/31/95	S95-0017	Monitor Well ACW #9	NT	NT	NT	NT
1/31/95	S95-0018	Monitor Well ACW #9 Dup.	NT	NT	NT	NT
6/18/93	S93-0392	Monitor Well ACW #10	109,000	1.7	82.1	0.63
9/14/93	S93-0526	Monitor Well ACW #10	NT	NT	NT	NT
11/9/93	S93-0680	Monitor Well ACW #10	NT	NT	NT	NT
4/22/94	S94-0388	Monitor Well ACW #10	NT	NT	NT	NT
4/22/94	S94-0389	Monitor Well ACW #10 DUP	NT	NT	NT	NT
10/28/94	S94-0751	Monitor Well ACW #10	NT	NT	NT	NT
2/1/95	S95-0019	Monitor Well ACW #10	NT	NT	NT	NT

ND = NONDETECTABLE
NT = NOT TESTED FOR

JAL #4 MONITOR WELL
ANALYTICAL RESULTS

SAMPLE DATE	SAMPLE NUMBER	SAMPLE DESCRIPTION	BENZENE ug/l	TOLUENE ug/l	ETHYLBENZENE ug/l	TOTAL XYLENES ug/l
3/10/93	S93-0114	Monitor Well ACW #5	NT	NT	NT	NT
6/17/93	S93-0387	Monitor Well ACW #5	ND	ND	ND	ND
9/16/93	S93-0536	Monitor Well ACW #5	NT	NT	NT	NT
11/9/93	S93-0678	Monitor Well ACW #5	NT	NT	NT	NT
4/21/94	S94-0385	Monitor Well ACW #5	NT	NT	NT	NT
10/28/94	S94-0749	Monitor Well ACW #5	NT	NT	NT	NT
1/31/95	S95-0015	Monitor Well ACW #5	NT	NT	NT	NT
6/18/93	S93-0388	Monitor Well ACW #6	4.6	2.5	1.2	4.9
9/16/93	S93-0537	Monitor Well ACW #6	NT	NT	NT	NT
11/8/93	S93-0677	Monitor Well ACW #6	NT	NT	NT	NT
4/21/94	S94-0384	Monitor Well ACW #6	NT	NT	NT	NT
10/28/94	S94-0750	Monitor Well ACW #6	NT	NT	NT	NT
1/31/95	S95-0016	Monitor Well ACW #6	NT	NT	NT	NT
6/17/93	S93-0391	Monitor Well ACW #9	ND	ND	ND	ND
9/14/93	S93-0525	Monitor Well ACW #9	NT	NT	NT	NT
11/9/93	S93-0679	Monitor Well ACW #9	NT	NT	NT	NT
4/22/94	S94-0387	Monitor Well ACW #9	NT	NT	NT	NT
12/1/94	S94-0795	Monitor Well ACW #9	NT	NT	NT	NT
12/1/94	S94-0796	Monitor Well ACW #9 Dup.	NT	NT	NT	NT
1/31/95	S95-0017	Monitor Well ACW #9	NT	NT	NT	NT
1/31/95	S95-0018	Monitor Well ACW #9 Dup.	NT	NT	NT	NT
6/18/93	S93-0392	Monitor Well ACW #10	ND	ND	ND	1.7
9/14/93	S93-0526	Monitor Well ACW #10	NT	NT	NT	NT
11/9/93	S93-0680	Monitor Well ACW #10	NT	NT	NT	NT
4/22/94	S94-0388	Monitor Well ACW #10	NT	NT	NT	NT
4/22/94	S94-0389	Monitor Well ACW #10 DUP	NT	NT	NT	NT
10/28/94	S94-0751	Monitor Well ACW #10	NT	NT	NT	NT
2/1/95	S95-0019	Monitor Well ACW #10	NT	NT	NT	NT

ND = NONDETECTABLE
NT = NOT TESTED FOR


PROJECT MANAGER
DOCUMENT MANAGER
CHECKED BY
DRAWN BY
ENSR-1
EPNG-12 (174-234
LOCATED 3,550' AT N59°W
EPNG-1
EPNG JAL NO. 4
PLANT
ACW-1
ENSR-2
ACW-2A
ACW-4
PTP-1
ENSR-3
ACW-3
ACW-8
EPNG-6
ACW-11
3193.61
HWY 18
3194.00
3193.00
3192.00
3191.00
ACW-6
3193.15
ACW-7
3193.08
ACW-5
3191.90
ACW-9
3192.38
ACW-10
3191.37
EXPLANATION
JAL NO. 4 PLANT SITE BOUNDARY
ACW-8
3,194.49
APPROXIMATE MONITORING WELL LOCATION AND NUMBER
WITH POTENTIOMETRIC SURFACE ELEVATION
5,000
GROUNDWATER ELEVATION CONTOUR IN FEET
ABOVE MEAN SEA LEVEL
APPROXIMATE GROUNDWATER FLOW DIRECTION
0
300
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SCALE IN FEET
N
EL PASO NATURAL GAS CO.
POTENTIOMETRIC SURFACE MAP
FOR FEBRUARY 2, 1995
EPNG JAL NO. 4
JAL, NEW MEXICO
CONTOUR INTERVAL
ONE FOOT

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 27, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-247

Mr. Thomas D. Hutchins
Environmental Compliance Engineering
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

RE: GROUND WATER REMEDIATION/INVESTIGATION
JAL NO. 4 GAS PLANT
LEA COUNTY, NEW MEXICO

Dear Mr. Hutchins:

The New Mexico Oil Conservation Division (OCD) has completed a review of El Paso Natural Gas Company's (EPNG) February 1995 "PROJECT WORK PLAN, JAL NO.4 FACILITY LOCATED NEAR JAL, NEW MEXICO". This document contains EPNG's work plan for remediation of contaminated ground water related to EPNG's operation of the Jal No. 4 Gas Plant. The document also contains a work plan for additional definition of the extent of ground water contamination at the site.

The above referenced work plan is approved with the following conditions:

1. If underground piping is to be used to convey pumped ground water to the injection well, the piping will be pressure tested to 3 psi above operating pressure prior to operation and the test results will be submitted to the OCD.

2. Prior to implementing the additional monitor well installation plan, EPNG will submit to the OCD by July 1, 1995 a revised work plan. The revised work plan will contain a map showing the proposed monitoring well locations. In addition to the proposed nested monitoring wells downgradient of ACW-5 and ACW-10, the revised work plan will also include a plan for installation of additional monitoring wells to determine the lateral extent of contamination.

3. The quarterly ground water sampling program will also include ground water sampling of monitor wells ACW-1 and ACW -11.

4. The quarterly reports will include the total volume of fluid pumped from recovery well ACW-4 during the quarter and the total volume pumped to date.

5. EPNG will notify the OCD at least one week in advance of all major scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.

6. All original documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not limit EPNG to the work proposed if contamination exists which is beyond the scope of the work plan or, if the activities fail to adequately remediate contamination related to EPNG's activities. In addition, OCD approval does not relieve EPNG of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District Office

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PS Form 3800, June 1990

Fold at line over top of envelope to the right of the return address.

Bill Olson

From: Bill Olson
To: Jerry Sexton
Cc: Wayne Price
Subject: EPNG Jal #4
Date: Monday, April 24, 1995 4:02PM
Priority: High

Attached is a draft approval letter for EPNG's recent ground water remediation/inveatigation work plan. Please provide me with any comments in writing by 4:00pm on 4/26/95. Thanks!

<<File Attachment: REMEDY1.APR>>

Bill Olson

From: POSTOFFICE
To: Bill Olson
Subject: Registered: Wayne Price
Date: Tuesday, April 25, 1995 7:13AM

[013] ***** CONFIRMATION OF REGISTERED MAIL *****
Your message:

TO: Wayne Price DATE: 04-24-95
SUBJECT: EPNG Jal #4 TIME: 15:57

Was accessed on 04-25-95 07:13

Bill Olson

From: Jerry Sexton
Date sent: Wednesday, April 26, 1995 2:09PM
To: Bill Olson
Subject: Registered: Jerry Sexton

Your message
To: Jerry Sexton
Subject: EPNG Jal #4
Date: Monday, April 24, 1995 4:02PM
was accessed on
Date: Wednesday, April 26, 1995 2:09PM

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Mr. William C. Olson
Hydrogeologist
State of New Mexico
Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

RE: Jal No. 4 Facility Project Work Plan

Dear Mr. Olson:

Enclosed are two copies of the above referenced Work Plan for your review. If you have any questions or additional comments please feel free to contact me at (915) 541-3242.

Sincerely,

Thomas D. Hutchins

Thomas D. Hutchins
Environmental Compliance Engineering

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Certified Mail
Return Receipt Requested

Thomas D. Hutchins

February 6, 1995

RECEIVED

FEB 13 1995

Environmental Bureau
Oil Conservation Division

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4
Lea County, New Mexico

Dear Mr. Olson:

This is to confirm the understanding from our telephone conversation on February 6, 1995. EPNG's contractor will provide the DRAFT Jal No. 4 Remediation Plan to EPNG on February 10, 1995. EPNG will provide the contractor comments on the DRAFT by February 17, and the contractor will finalize the plan by February 24. Because of the work load at NMOCD, you said it would not be possible to provide comments on the DRAFT. Therefore, EPNG will provide the NMOCD two copies of the final plan by February 27, 1995.

Once you have reviewed the plan, we can meet to review the plan and began implementation.

If you have any questions or need additional information, please contact me at 915/541-3242.

Sincerely,

Thomas D. Hutchins

Thomas D. Hutchins
Manager, Environmental Compliance Engineering

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Certified Mail
Return Receipt Requested

Thomas D. Hutchins

November 15, 1994

Mr. William C. Olson
Hydrogeologist, Environmental Bureau
Energy, Mineral and Natural Resources Department
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

Concept OK
need work
plan
DP approval

RE: Phase IV Ground Water Contamination Study
EPNG Jal No. 4
Lea County, New Mexico

Dear Mr. Olson:

I appreciate your review of the subject report. This letter is in response to the questions raised in your August 26, 1994, letter. The responses are offered in the same order as the questions in your letter.

1. During the placement of ACW-8, the lower ten feet of the bore hole collapsed (i.e. from 160 to 170 +/-). Not knowing the thickness of the confining layer, it was decided that an attempt to redrill may breach the layer. The remaining wells were drilled to the red bed to determine it's depth. However, for consistency, the wells were set at the same depth as ACW-8.

2. EPNG has recommended that the contaminated groundwater be pumped from ACW-4 and injected into the injection well at Jal #4. OCD had previously stated that the well may be reclassified and may need to be upgraded. It is our understanding that the well is still a Class 2 injection well and could be used to dispose of the recovered liquids. This would be included in our work plan for the "pump and dispose" system once OCD approves of the concept. The plan would generally include pumping and rejecting until acceptable analytical results are achieved.

3. The recovery system work plan would include a section outlining the proposed location of the two nested wells downgradient of the plume. EPNG would like to accomplish all work at the same time to make it more cost effective. The wells would be installed in the prevailing direction of plume migration. One well would monitor the upper level of the groundwater characteristics and the other well the lower level characteristics.

4. EPNG has been monitoring the groundwater since the installation of ACW-8 through ACW-11 in the summer of 1992. Quarterly monitoring was performed through 1993. Semiannual monitoring is being conducted in 1994. Enclosed are the results and observations of past monitoring. EPNG will continue to monitor the groundwater on a semiannual basis and the results provided to the OCD.

5. EPNG will send all future correspondence to the Santa Fe Office with a copy to the Hobbs Office.

We appreciate your cooperation and the direction provided on this project. A consultant is in the process of designing the recovery system (item 2.) and the additional monitor well locations (item 3.), with installation planned for 1995.

If you have any questions or need additional information, please contact Gerry Garibay at 915/541-3242 or Tom Martinez at 915/686-3226. Gerry is the hydrogeologist and Tom is the engineer assigned to this project.

Sincerely,

Thomas D. Hutchins

Thomas D. Hutchins
Manager, Environmental Compliance Engineering

cc: Jerry Sexton,
Hobbs District Supervisor
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

OIL CONSERVATION DIVISION
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

New Mexico DRUG FREE It's a State of Mind!

January 12, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-200

Mr. Thomas D. Hutchins
Environmental Compliance Engineering
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

RE: PHASE IV GROUND WATER CONTAMINATION STUDY
EPNG JAL NO. 4 GAS PLANT

Dear Mr. Hutchins:

The New Mexico Oil Conservation Division (OCD) has completed a review of El Paso Natural Gas Company's (EPNG) November 15, 1994 "PHASE iv GROUND WATER CONTAMINATION STUDY, EPNG JAL NO.4, LEA COUNTY, NEW MEXICO" and June 20, 1994 "JAL NO. 4 PLANT, PHASE IV GROUNDWATER STUDY, EL PASO NATURAL GAS COMPANY". These documents contain the results of EPNG's recent offsite investigations of the extent of ground water contamination related to the operation of the Jal No. 4 Gas Plant and a conceptual remediation plan.

The OCD approves of the investigative actions taken to date and the remedial action concepts as presented in the above referenced documents. However, the OCD would like to express their concern that monitor wells ACW-8, ACW-9, ACW-10 and ACW-11 do not accurately represent ground water conditions at the base of the aquifer. These wells were to be located at the aquifer/redbed contact to determine the downgradient limit of the high density saline plume at the base of the aquifer. Unfortunately these wells were constructed with well screens 10 feet above this contact. Consequently, the OCD defers comment on the usefulness of these wells for monitoring basal aquifer conditions.

In order to implement the conceptual remediation plan, the OCD requests that EPNG submit the following information to the OCD, by February 10, 1995, for approval:

A. Work Plans

1. A detailed remedial action work plan to initiate recovery of contaminated ground water as soon as possible.

2. A work plan for determining the full extent of contamination related to EPNG's activities. Please be aware that the OCD's review of the April 1994 ground water sampling data shows that all of the downgradient monitoring wells now contain contaminants in excess of New Mexico Water Quality Control Commission (WQCC) ground water standards

B. Ground Water Quality Monitoring

Until additional downgradient monitoring wells are installed, OCD requires that EPNG perform ground water monitoring as follows:

1. Ground water samples will be taken from monitor wells ACW-5, ACW-6, ACW-9, ACW-10, on a quarterly basis. The water from these wells will be analyzed for benzene, toluene, ethylbenzene, xylene (BTEX) and major cations and anions using EPA approved methods.

2. Quarterly reports will be submitted to the OCD on April 1, July 1, October 1 and January 1 of each year. The quarterly reports will contain:

   a. A summary of the laboratory analytic results of water quality sampling of monitor wells from the quarter. The data from each monitoring point will be presented in tabular form for each well and will list past and present sampling results.

   b. A water table elevation map showing the quarterly elevation of the water table in all monitoring wells and the direction of the hydraulic gradient.

The OCD request that EPNG notify the OCD Santa Fe Office at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples. In addition, please submit all original documents to the OCD Santa Fe Office with copies provided to the OCD Hobbs Office.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs Office

P 667 242 200

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR Facility: 5004 Sample Date: 06/15/1993
Sample No: ACW-4 Lab: ATAS
Lab Sample No: 7005.03 Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL	<	0.2	mg/l	ND
* 353.2 NITRATE AS N	OTHER	NITRATE	<	0.10	mg/l	NO
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		1547	mg/l	NONE

Enter) Display
8) Query
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5) Next 21) Last 12) Delete
14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-54 — Lab: ATAS

Lab Sample No: 4753.02 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		82169.2	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		7.08		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		703000	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		160	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		27000	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		38133	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		1952	mg/l	NONE

Enter) Display

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5) Next 21) Last

8) Query

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14) Output

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date: 06/15/1993

Sample No: ACW-4 — Lab: ATAS

Lab Sample No: 7005.03 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		92033	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		68366	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS	<	500.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	METAL	BA		606	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR	<	5.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	OTHER	K		196000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		16400000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	300.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		48226	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

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5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date: 06/15/1993

Sample No: 7005.03 — Lab: EPNG - FIELD SERVICES

Lab Sample No: 7005.03 — Analysis Date: 06/21/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		85.6	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		20.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		132	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		1120	ug/l	NONE

Enter) Display

8) Query
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5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-4 — Lab: ATAS

Lab Sample No: 4753.01 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		80761.8	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		7.07		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		69100	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		165	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		26700	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		38350	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		1963	mg/l	NONE

Enter) Display

8) Query
9) Modify
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5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-4 — Lab: ATAS

Lab Sample No: 4753.02 — Analysis Date: 07/21/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		157	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	50.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		228	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		2640	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		3025	ug/l	NONE

Enter) Display

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-4 — Lab: ATAS

Lab Sample No: 4753.01 — Analysis Date: 07/21/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		184	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		125	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		300	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		2640	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		3249	ug/l	NONE

Enter) Display

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8) Query

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12) Delete

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR Facility: 5004 Sample Date:
Sample No: ACW-74 Lab: ATAS
Lab Sample No: 4753.04 Analysis Date: 07/21/1992

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020	BTEX IN AQUEOUS SOLU	HYDR	C6H6		173	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		102	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		249	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		2310	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		2834	ug/l	NONE

Enter) Display
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5) Next 21) Last 12) Delete
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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-74/WOHCL — Lab: ATAS

Lab Sample No: 4753.08 — Analysis Date: 07/21/1992

Analysis *Method	& Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020	BTEX IN AQUEOUS SOLU	HYDR	C6H6		155	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		25.0	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		255	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		2360	ug/l	ND
* 8020	BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		2770	ug/l	NONE

Enter) Display

8) Query
9) Modify
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31) PrtScr
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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-84 — Lab: ATAS

Lab Sample No: 4753.05 — Analysis Date: 07/21/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		174	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	50.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		239	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		2460	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		2873	ug/l	NONE

Enter) Display

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-4 / MONITOR — Facility: 5004 — Sample Date: 04/19/1994

Sample No: S94-0373 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0373 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		108600	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		79400	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		54000	mg/l	NONE

Enter) Display

8) Query
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5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-1 / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0377 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: A94-0377 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		16520	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		8430	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		5400	mg/l	NONE

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-3 / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0375 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0375 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		20200	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		8360	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		6800	mg/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-5 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: 7035.04 — Lab: ATAS

Lab Sample No: 7035.04 — Analysis Date: 06/25/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES	<	1.0	ug/l	ND

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-5 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-5 — Lab: ATAS

Lab Sample No: 4774.01 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		1304.5	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		7.08		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		1880	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		10300	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		324000	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		418	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		457	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

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32) Menu

Environmental/Compliance System

List Well Analysis Parameters

Well Id: ACW-5 / MONITOR Facility: 5004 Sample Date: 06/17/1993
Sample No: ACW-5 Lab: ATAS
Lab Sample No: 7035.04 Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		3995	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		3354	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS	<	10.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	METAL	BA		55.8	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		32.3	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		9400	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		513000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	3.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		815	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

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5) Next 21) Last 12) Delete
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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-5 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-5 — Lab: ATAS

Lab Sample No: 7035.04 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL	<	0.2	mg/l	ND
* 353.2 NITRATE AS N	OTHER	NITRATE		8.2	mg/l	NONE
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		1091	mg/l	NONE

Enter) Display

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5) Next 21) Last

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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-5 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-5 — Lab: ATAS

Lab Sample No: 4774.01 — Analysis Date: 07/22/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC5H5		1.4	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		12.9	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		14.3	ug/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
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14) Output
15) Office
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Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-5 / MONITOR — Facility: 5004 — Sample Date: 04/21/1994

Sample No: S94-0385 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0385 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		4131	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		3300	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		800	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-6 / MONITOR — Facility: 5004 — Sample Date: 06/18/1993

Sample No: 7035.02 — Lab: ATAS

Lab Sample No: 7035.02 — Analysis Date: 06/25/1993

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020	BTEX IN AQUEOUS SOLU	HYDR	C6H6		4.6	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		1.2	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		2.5	ug/l	NONE
* 8020	BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		4.9	ug/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-6 / MONITOR — Facility: 5004 — Sample Date: 06/18/1993

Sample No: ACW-6 — Lab: ATAS

Lab Sample No: 7035.02 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		8082	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		5080	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS		71.8	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	BA		492	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		4.1	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		6530	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		1910000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	3.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		2205	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-6 / MONITOR — Facility: 5004 — Sample Date: 06/18/1993

Sample No: ACW-6 — Lab: ATAS

Lab Sample No: 7035.02 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL		20.6	mg/l	NONE
* 353.2 NITRATE AS N	OTHER	NITRATE		8.3	mg/l	NONE
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		194	mg/l	NONE

Enter) Display

		8) Query	14) Output
		9) Modify	15) Office
4) Prev	20) First	11) Add 27) Add	16) Return
5) Next	21) Last	12) Delete	31) PrtScr
			32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-6 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-6 — Lab: ATAS

Lab Sample No: 4774.03 — Analysis Date: 07/21/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		1.8	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		1.8	ug/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List Well Analysis Parameters

Well Id: ACW-6 / MONITOR Facility: 5004 Sample Date:

Sample No: ACW-6 Lab: ATAS

Lab Sample No: 4774.03 Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		871.5	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		8.67		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		600	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		3590	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		173000	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		172	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		144	mg/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-6 / MONITOR — Facility: 5004 — Sample Date: 04/21/1994

Sample No: S94-0384 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0384 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		11080	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		6930	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		3600	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-7 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-7 — Lab: ATAS

Lab Sample No: 7035.03 — Analysis Date: 06/25/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		3.2	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		7.0	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		4.9	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		1.5	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		16.6	ug/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-7 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-7 — Lab: ATAS

Lab Sample No: 4774.02 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		7069.4	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		7.12		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		4840	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		6120	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		1200000	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		2232	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4	<	2.0	mg/l	ND

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-7 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-7 — Lab: ATAS

Lab Sample No: 7035.03 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		9733	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		6472	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS		18.8	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	BA		1600	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		8.6	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		7570	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		2044000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	3.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		3351	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-7 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-7 — Lab: ATAS

Lab Sample No: 7035.03 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL		3.8	mg/l	NONE
* 353.2 NITRATE AS N	OTHER	NITRATE	<	0.10	mg/l	ND
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		88.5	mg/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-7 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW-7 — Lab: ATAS

Lab Sample No: 4774.02 — Analysis Date: 07/22/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		3.3	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		3.3	ug/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-7 / MONITOR — Facility: 5004 — Sample Date: 04/21/1994

Sample No: S94-0383 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0383 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		10870	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		6580	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		3500	mg/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-8 / MONITOR — Facility: 5004 — Sample Date: 06/16/1993

Sample No: ACW-8 — Lab: ATAS

Lab Sample No: 7005.01 — Analysis Date: 06/21/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		1.4	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		1.2	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		2.6	ug/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-8 / MONITOR Facility: 5004 Sample Date: 06/16/1993
Sample No: ACW-8 Lab: ATAS
Lab Sample No: 7005.01 Analysis Date:

*Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		1973	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		2892	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS	<	50.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	METAL	BA		79.7	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		24.8	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		34100	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		305000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	30.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		552	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display
8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete
14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-8 / MONITOR — Facility: 5004 — Sample Date: 06/16/1993

Sample No: ACW-8 — Lab: ATAS

Lab Sample No: 7005.01 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL		1.9	mg/l	NONE
* 353.2 NITRATE AS N	OTHER	NITRATE		0.41	mg/l	NONE
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		150	mg/l	NONE

Enter) Display

		8) Query	14) Output
		9) Modify	15) Office
4) Prev	20) First	11) Add 27) Add	16) Return
5) Next	21) Last	12) Delete	31) PrtScr
			32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-8 / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0378 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0378 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		15260	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		8760	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		6400	mg/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-9 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-9 — Lab: ATAS

Lab Sample No: 7035.05 — Analysis Date: 06/25/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES	<	1.0	ug/l	ND

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-9 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-9 — Lab: ATAS

Lab Sample No: 7035.05 — Analysis Date:

*Method	Analysis Desc	*Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		1097	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		900	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS	<	10.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	METAL	BA		90.0	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		8.0	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		12500	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		121000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	3.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		472	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-9 / MONITOR — Facility: 5004 — Sample Date: 06/17/1993

Sample No: ACW-9 — Lab: ATAS

Lab Sample No: 7035.05 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL		1.7	mg/l	NONE
* 353.2 NITRATE AS N	OTHER	NITRATE	<	1.0	mg/l	ND
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		81.0	mg/l	NONE

Enter) Display

		8) Query	14) Output
		9) Modify	15) Office
4) Prev	20) First	11) Add 27) Add	16) Return
5) Next	21) Last	12) Delete	31) PrtScr
			32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW-9 / MONITOR — Facility: 5004 — Sample Date: 04/22/1994

Sample No: S94-0387 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0387 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		3900	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		2508	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		1150	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW10 / MONITOR — Facility: 5004 — Sample Date: 06/18/1993

Sample No: ACW10 — Lab: ATAS

Lab Sample No: 7035.01 — Analysis Date: 06/24/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		1.7	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		1.7	ug/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW10 / MONITOR — Facility: 5004 — Sample Date: 06/18/1993

Sample No: ACW10 — Lab: ATAS

Lab Sample No: 7035.01 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		964	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		814	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS	<	10.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	METAL	BA		126	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		10.2	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		14200	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		109000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	3.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		420	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display
8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete
14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW10 / MONITOR — Facility: 5004 — Sample Date: 06/18/1993

Sample No: ACW10 — Lab: ATAS

Lab Sample No: 7035.01 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2	EPA FLOURIDE TEST	OTHER	FL		1.7	mg/l	NONE
* 353.2	NITRATE AS N	OTHER	NITRATE		0.63	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		82.1	mg/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW10 / MONITOR — Facility: 5004 — Sample Date: 04/22/1994

Sample No: S94-0388 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0388 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		2440	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		1638	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		700	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW10 / MONITOR — Facility: 5004 — Sample Date: 04/22/1994

Sample No: S94-0389 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0389 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		2400	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		1564	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		600	mg/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW11 / MONITOR — Facility: 5004 — Sample Date: 06/19/1993

Sample No: ACW11 — Lab: ATAS

Lab Sample No: 7035.06 — Analysis Date: 06/25/1993

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5	<	1.0	ug/l	ND
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES	<	1.0	ug/l	ND

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW11 / MONITOR — Facility: 5004 — Sample Date: 06/19/1993

Sample No: ACW11 — Lab: ATAS

Lab Sample No: 7035.06 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		1727	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		1398	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS	<	10.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	METAL	BA		94.2	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR		5.9	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		10100	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		212000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	3.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		638	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW11 / MONITOR — Facility: 5004 — Sample Date: 06/19/1993

Sample No: ACW11 — Lab: ATAS

Lab Sample No: 7035.06 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL		1.7	mg/l	NONE
* 353.2 NITRATE AS N	OTHER	NITRATE		0.56	mg/l	NONE
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		79.4	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW11 / MONITOR — Facility: 5004 — Sample Date: 04/21/1994

Sample No: S94-0382 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0382 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		16290	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		9520	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		6400	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW2A / MONITOR — Facility: 5004 — Sample Date:

Sample No: ACW2A — Lab: ATAS

Lab Sample No: 4722.01 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		43500	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		8.07		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		24900	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		35900	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		5080000	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		15275	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		16.4	mg/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW2A / MONITOR Facility: 5004 Sample Date:

Sample No: ACW2A Lab: ATAS

Lab Sample No: 4722.01 Analysis Date: 07/16/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		59.5	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		14.7	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		7.3	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		21.3	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		102.8	ug/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ACW2A / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0374 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0374 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		28600	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		16900	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		9000	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR1 / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0379 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0379 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		3060	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		1834	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		800	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR1 / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0380 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0380 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		4930	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		2964	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		1400	mg/l	NONE

Enter) Display

8) Query
9) Modify
11) Add 27) Add
12) Delete

4) Prev 20) First
5) Next 21) Last

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR2 / MONITOR — Facility: 5004 — Sample Date: 06/16/1993

Sample No: ENSR2 — Lab: ATAS

Lab Sample No: 7005.02 — Analysis Date:

*Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		29964	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		19488	mg/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	AS		1500	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	BA		152	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	CR	<	50.0	ug/l	ND
* 200.7	METALS BY ICP METHOD	OTHER	K		29600	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		65000000	ug/l	NONE
* 200.7	METALS BY ICP METHOD	METAL	PB	<	300.0	ug/l	ND
* 325.2	EPA CHLORIDE TEST	OTHER	CL		9943	mg/l	NONE
* 335.2	EPA CYANIDE TEST	OTHER	CN-TOT	<	10.0	ug/l	ND

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR2 / MONITOR — Facility: 5004 — Sample Date: 06/16/1993

Sample No: ENSR2 — Lab: ATAS

Lab Sample No: 7005.02 — Analysis Date:

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 340.2 EPA FLOURIDE TEST	OTHER	FL		40.3	mg/l	NONE
* 353.2 NITRATE AS N	OTHER	NITRATE	<	0.10	mg/l	ND
* 375.4 EPA METHOD FOR SULFA	OTHER	SO4		340	mg/l	NONE

Enter) Display

4) Prev 20) First 8) Query 9) Modify 11) Add 27) Add 12) Delete 14) Output 15) Office 16) Return 31) PrtScr 32) Menu

5) Next 21) Last

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR2 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ENSR2/WO HCL — Lab: ATAS

Lab Sample No: 4753.07 — Analysis Date: 07/21/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		77.4	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		37.8	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		61.2	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		206.0	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		382.4	ug/l	NONE

Enter) Display

4) Prev 20) First 8) Query 9) Modify 11) Add 27) Add 12) Delete 5) Next 21) Last

14) Output 15) Office 16) Return 31) PrtScr 32) Menu

Environmental/Compliance System

List Well Analysis Parameters

Well Id: ENSR2 / MONITOR Facility: 5004 Sample Date:

Sample No: ENSR-2 Lab: ATAS

Lab Sample No: 4753.03 Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		106500	umhos	NONE
* 150.1	EPA PH TEST	OTHER	PH		8.53		NONE
* 160.1	EPA TDS TEST	OTHER	TDS		62300	mg/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	K		159	ug/l	NONE
* 200.7	METALS BY ICP METHOD	OTHER	NA		12400	ug/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		30676	mg/l	NONE
* 375.4	EPA METHOD FOR SULFA	OTHER	SO4		1502	mg/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR2 / MONITOR — Facility: 5004 — Sample Date:

Sample No: ENSR2 — Lab: ATAS

Lab Sample No: 4753.03 — Analysis Date: 07/21/1992

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 8020 BTEX IN AQUEOUS SOLU	HYDR	C6H6		105.0	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	ETC6H5		35.1	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	MEC6H5		114.0	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	T-XYLENES		116.0	ug/l	NONE
* 8020 BTEX IN AQUEOUS SOLU	HYDR	TOTAL-BTEX		370.1	ug/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR2 / MONITOR — Facility: 5004 — Sample Date: 04/20/1994

Sample No: S94-0376 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0376 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		14900	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		8620	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		4600	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: ENSR3 / MONITOR — Facility: 5004 — Sample Date: 04/21/1994

Sample No: S94-0381 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0381 — Analysis Date: 04/29/1994

Analysis *Method & Desc	Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1 EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		1430	umhos	NONE
* 160.1 EPA TDS TEST	OTHER	TDS		960	mg/l	NONE
* 325.2 EPA CHLORIDE TEST	OTHER	CL		260	mg/l	NONE

Enter) Display

8) Query
9) Modify
4) Prev 20) First 11) Add 27) Add
5) Next 21) Last 12) Delete

14) Output
15) Office
16) Return
31) PrtScr
32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: EPNG1 / MONITOR — Facility: 5004 — Sample Date: 06/16/1993

Sample No: EPNG1 — Lab: ATAS

Lab Sample No: 7005.05 — Analysis Date:

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		746	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		520	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		86.1	mg/l	NONE

Enter) Display

4) Prev 20) First

5) Next 21) Last

8) Query

9) Modify

11) Add 27) Add

12) Delete

14) Output

15) Office

16) Return

31) PrtScr

32) Menu

Environmental/Compliance System

List — Well Analysis Parameters

Well Id: PTP-1 / MONITOR — Facility: 5004 — Sample Date: 04/25/1994

Sample No: S94-0393 — Lab: EPNG - TRANSMISSION OPS.

Lab Sample No: S94-0393 — Analysis Date: 04/29/1994

Analysis *Method & Desc		Analysis *Type	Parameter	*Sign	Result	*Unit	*Qual
* 120.1	EPA SPECIFIC CONDUCT	OTHER	CONDUCTIVY		2490	umhos	NONE
* 160.1	EPA TDS TEST	OTHER	TDS		1528	mg/l	NONE
* 325.2	EPA CHLORIDE TEST	OTHER	CL		650	mg/l	NONE

Enter) Display

		8) Query	14) Output
		9) Modify	15) Office
4) Prev	20) First	11) Add 27) Add	16) Return
5) Next	21) Last	12) Delete	31) PrtScr
			32) Menu