1R- 138

APPROVALS

YEAR(S):

2004

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

September 16, 2004

Mr. Todd K. Choban
NOVA Safety and Environmental
2057 Commerce St.
Midland, TX 79703

The New Mexico Oil Conservation Division (NMOCD) has received the "Addendum to Additional Subsurface Investigation and Modified Stage II Abatement Plan", dated July 2004, for the TNM 97-16 site you submitted on behalf of Plains Marketing, LP. The NMOCD reference is 1R-138. In Section 3.0 "Schedule of Abatement Plan Activities" on page 4 of the referenced document, Plains Marketing, LP has requested a change in the soil cleanup standard at the site from 100 mg/kg to 500 mg/kg for total petroleum hydrocarbons.

The approval of this alternative standard is contingent upon Plains Marketing LP demonstrating that this level will not cause adverse effects to human health or the environment. Upon receipt of this demonstration, NMOCD will determine whether this proposed standard is appropriate.

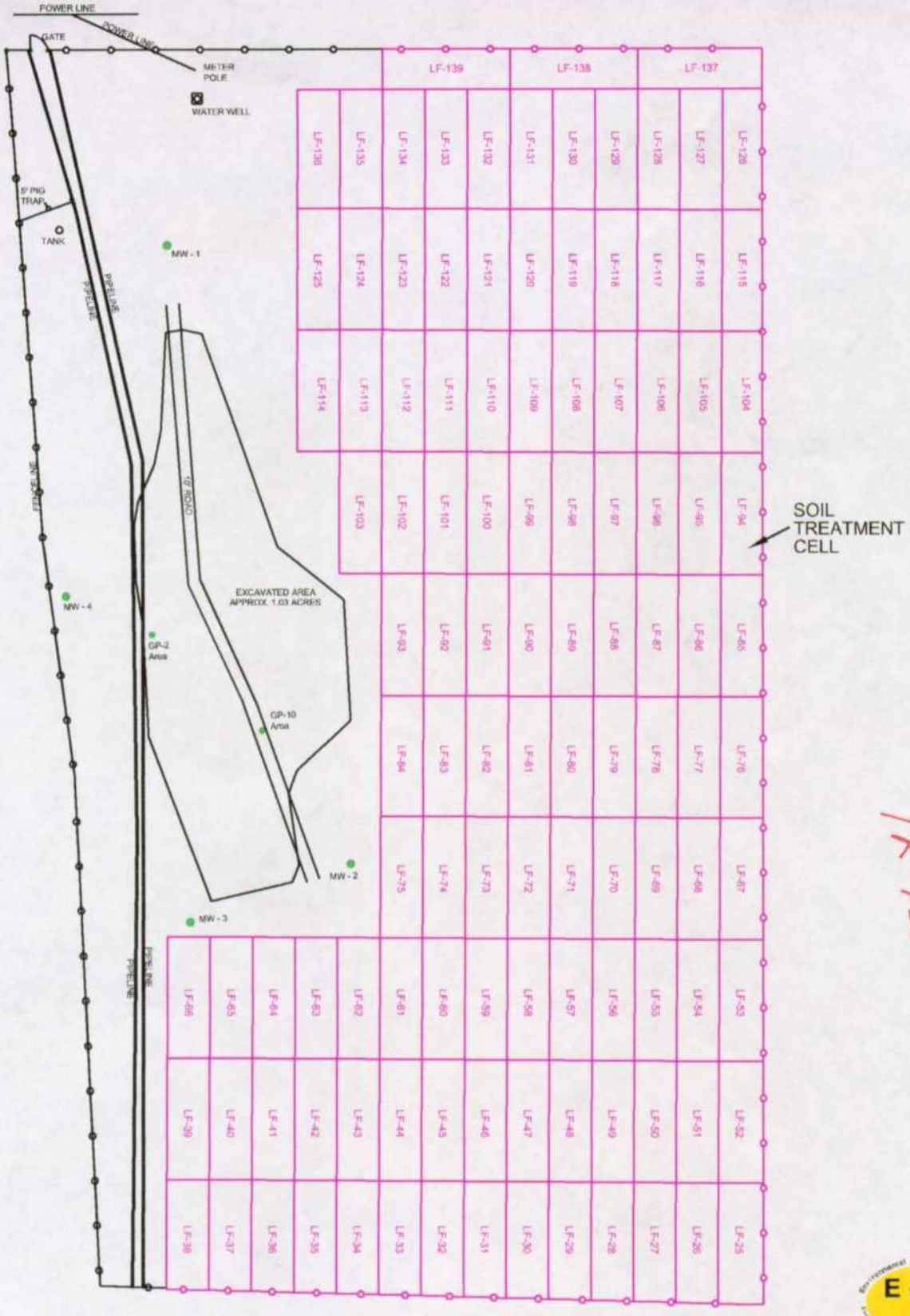
If you have any questions, contact me at (505) 476-3492 or emartin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin

Edwin E. Martin
Environmental Bureau

Cc: Camille Reynolds, Plains, Hobbs
Jeff Dann, Plains, Houston
Larry Johnson, NMOCD, Hobbs



LEGEND:

- ETGI MONITORING WELL
- TREATMENT CELL

SURVEY DATE: 10/5/99

120 60 0 60 120

Distance in Feet

Figure 2

Site Map

Link Energy, L.P.
Becky Doom No. 97-16
Jal, NM

Environmental Technology Group, INC.

Scale: 1" = 120'	Prep By: RS	Checked By: KD
January 23, 2002	ETGI Project # EO2021	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

1R-138

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
Stockpile Sample 1	11/26/01	<0.025	0.027	<0.025	<0.025	<0.025	<10	502	142
Stockpile Sample 2	11/26/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	752	168
Stockpile Sample 3	11/29/01	<0.025	0.025	<0.025	<0.025	<0.025	<10	1400	160
Stockpile Sample 4	11/29/01	<0.025	0.034	<0.025	<0.025	<0.025	<10	1320	195
Stockpile Sample 5	11/30/01	<0.025	0.037	<0.025	<0.025	<0.025	<10	1150	186
Stockpile Sample 6	11/30/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	1360	149
Pit Sample SE #1	12/01/01	<0.025	0.054	<0.025	<0.025	<0.025	<10	153	26
Pit Sample SW #2	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	48	26
Pit Sample NW #3	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	35
Pit Sample NE #4	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	42	71
Pit - Far N. Point	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	62	408
NE Quad LF #1	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	451	89
SE Quad LF #2	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	388	160
SW Quad LF #3	12/01/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	259	53
Excavation Wall South	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	44.4	202	
Excavation Wall South	09/15/03	0.033	0.326	0.872	1.05	0.667	<10.0	58.5	
Excavation Wall North	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	
Excavation Wall East	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	18.4	144	
Excavation Wall West	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10	34	
Excavation Bottom South	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10	60.6	
Excavation Bottom Middle	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	10.3	88	
Excavation Bottom North	06/03/02	<0.025	<0.025	<0.025	<0.025	<0.025	10.5	66.8	
Middle East Wall Exc.	04/17/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	106	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
Middle East Wall Exc.	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
SE Wall Exc.	04/17/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	308	
SE Wall Exc.	09/15/03	<0.025	0.187	0.557	1.07	0.627	<10.0	<10.0	
NE Wall Exc.	04/17/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	66.9	
H.A GP-10 Area 2'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	34.7	
H.A GP-10 Area 4'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
H.A GP-10 Area 6'	09/04/03	<0.025	<0.025	<0.025	0.036	<0.025	12.6	153	
H.A GP-10 Area 8'	09/04/03	<0.025	<0.025	<0.025	0.037	<0.025	15.7	177	
H.A GP-2 Area 2'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	132	
H.A GP-2 Area 4'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	51.0	
H.A GP-2 Area 6'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
H.A GP-2 Area 8'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	10.6	112	
H.A GP-2 Area 10'	09/04/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	61.2	
LF-25	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	20.7	
LF-26	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	32.4	
LF-27	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	24.2	
LF-28	09/15/03	<0.025	<0.025	0.028	0.047	<0.025	<10.0	34.3	
LF-29	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	39.1	
LF-30	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	12.5	
LF-31	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	17.3	
LF-32	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	47.7	
LF-33	09/15/03	<0.025	<0.025	<0.025	0.029	<0.025	<10.0	43.9	
LF-34	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	50.9	
LF-35	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	54.1	
LF-36	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	68.5	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
LF-37	09/15/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	75.8	
LF-38	09/15/03	<0.025	<0.025	<0.025	0.034	<0.025	<10.0	96.8	
LF-39	09/16/03	<0.025	<0.025	<0.025	0.031	<0.025	<10.0	46.2	
LF-40	09/16/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	24.4	
LF-41	09/16/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	45.7	
LF-42	09/16/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	15.5	
LF-43	09/16/03	<0.025	<0.025	<0.025	0.042	<0.025	<10.0	73.5	
LF-44	09/16/03						<10.0	140	
LF-45	09/16/03						<10.0	174	
LF-46	09/16/03						<10.0	108	
LF-47	09/16/03						<10.0	233	
LF-48	09/16/03	<0.025	<0.025	<0.025	0.026	<0.025	<10.0	74.4	
LF-49	09/16/03	<0.025	<0.025	<0.025	0.029	<0.025	<10.0	77.0	
LF-50	09/16/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	82.2	
LF-51	09/16/03	<0.025	<0.025	<0.025	0.026	<0.025	<10.0	89.1	
LF-52	09/16/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	60.2	
LF-53	09/16/03						<10.0	196	
LF-54	09/16/03						<10.0	181	
LF-55	09/16/03						<10.0	113	
LF-56	09/16/03						<10.0	146	
LF-57	09/16/03						<10.0	180	
LF-58	09/16/03						<10.0	288	
LF-59	09/16/03						<10.0	167	
LF-60	09/16/03	<0.025	<0.025	<0.025	38.8	<0.025	<10.0	99.4	
LF-61	09/16/03						153	1500	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
LF-62	09/16/03						12.5	415	
LF-63	09/16/03						15.9	396	
LF-64	09/16/03						17.8	686	
LF-65	09/16/03						<10.0	112	
LF-66	09/16/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	67.7	
LF-67	09/16/03						<10.0	242	
LF-68	09/16/03						<10.0	188	
LF-69	09/16/03						<10.0	141	
LF-70	09/16/03						<10.0	115	
LF-71	09/16/03						<10.0	199	
LF-72	09/16/03						<10.0	332	
LF-73	09/16/03						<10.0	348	
LF-74	09/16/03						<10.0	320	
LF-75	09/16/03						<10.0	466	
LF-76	09/16/03						<10.0	248	
LF-77	09/16/03						<10.0	235	
LF-78	09/16/03						<10.0	164	
LF-79	09/16/03						<10.0	160	
LF-80	09/16/03						<10.0	203	
LF-81	09/16/03						<10.0	121	
LF-82	09/16/03						33.2	158	
LF-83	09/16/03						<10.0	231	
LF-84	09/16/03						<10.0	324	
LF-85	09/17/03						<10.0	213	
LF-86	09/17/03						<10.0	192	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
LF-87	09/17/03						<10.0	258	
LF-88	09/17/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	74.3	
LF-89	09/17/03						<10.0	152	
LF-90	09/17/03						<10.0	150	
LF-91	09/17/03						<10.0	129	
LF-92	09/17/03	<0.025	<0.025	<0.025	0.045	<0.025	<10.0	70.0	
LF-93	09/17/03						<10.0	527	
LF-94	09/17/03						<10.0	341	
LF-95	09/17/03						<10.0	274	
LF-96	09/17/03	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	65.6	
LF-97	09/17/03						<10.0	287	
LF-98	09/17/03						<10.0	246	
LF-99	09/17/03						<10.0	224	
LF-100	09/17/03						<10.0	839	
LF-101	09/17/03						<10.0	173	
LF-102	09/17/03						10.2	1340	
LF-103	09/17/03						<10.0	543	
LF-104	09/17/03						<10.0	428	
LF-105	09/17/03						<10.0	385	
LF-106	09/17/03						<10.0	190	
LF-107	09/17/03						<10.0	414	
LF-108	09/17/03						<10.0	297	
LF-109	09/17/03						<10.0	615	
LF-110	09/17/03						<10.0	459	
LF-111	09/17/03						11.7	1100	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
LF-112	09/17/03						<10.0	789	
LF-113	09/17/03						<10.0	736	
LF-114	09/17/03						<10.0	772	
LF-115	09/17/03						<10.0	660	
LF-116	09/17/03						12.8	1350	
LF-117	09/17/03						18.6	1220	
LF-118	09/17/03						13.9	1130	
LF-119	09/17/03						19.8	1200	
LF-120	09/17/03						<10.0	356	
LF-121	09/17/03						12.3	1230	
LF-122	09/17/03						<10.0	1020	
LF-123	09/17/03						10.9	1150	
LF-124	09/17/03						<10.0	1100	
LF-125	09/17/03						<10.0	1280	
LF-126	09/17/03						<10.0	849	
LF-127	09/17/03						<10.0	746	
LF-128	09/17/03						<10.0	838	
LF-129	09/17/03						24.7	2520	
LF-130	09/17/03						10	1140	
LF-131	09/17/03						12.8	863	
LF-132	09/17/03						13.7	1340	
LF-133	09/17/03						<10.0	940	
LF-134	09/17/03						<10.0	1120	
LF-135	09/17/03						10.5	1090	
LF-136	09/17/03						<10.0	1120	

TABLE 1
SUMMARY OF SOIL CHEMISTRY

TNM 97-16
LINK ENERGY LIMITED PARTNERSHIP
MONUMENT, NEW MEXICO
ETGI PROJECT # LI 2021

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		Methods: EPA SW 846-9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	CHLORIDE (mg/kg)
LF-137	09/17/03						17.5	2140	
LF-138	09/17/03						<10.0	1070	
LF-139	09/17/03						12.1	1010	

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

May 28, 2003

1R-138

Mr. William von Drehle, Director, Environmental
EOTT ENERGY LLC
P.O. Box 4666
Houston, Texas 77210-4666

RE: CASE #1R 0138 TNM 97-16 BECKY DOOM

Dear Mr. Von Drehle:

The New Mexico Oil Conservation Division (OCD) has reviewed the following EOTT Energy LLC documents, which were submitted to the OCD by EOTT's consultant Environmental Technology Group, Inc (ETGI.)

- April 2001 "ANNUAL MONITORING REPORT, EOTT PIPELINE COMPANY, TNM 97-16, LEA COUNTY, NEW MEXICO."
- April 2003 "ANNUAL MONITORING REPORT, EOTT ENERGY, LLC, TNM 97-16, NE ¼ NW ¼ OF SECTION 12, TOWNSHIP 24 NORTH, RANGE 37 EAST, LEA COUNTY NEW MEXICO"

These documents contain the results of ETGI's ground water monitoring activities of a single monitoring well on this site. Quarterly sampling since January 1999 has shown the ground water to be in compliance with New Mexico Water Quality Control Commission (WQCC) standards as demonstrated in twenty one consecutive sampling events.

The closure for this site is approved on the condition that the monitor wells be properly plugged and abandoned according to standard industry practices.

Please be advised that OCD approval does not relieve EOTT of responsibility if remaining contaminants are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state, tribal or local laws and regulations. If you have any questions, please email me or call me at (505) 476-3493.

Sincerely,

Randolph Bayliss

Randolph Bayliss, P.E.
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

May 28, 2003

Mr. William von Drehle, Director, Environmental
EOTT ENERGY LLC
P.O. Box 4666
Houston, Texas 77210-4666

RE: CASE #1R 0138 TNM 97-16 BECKY DOOM

Dear Mr. Von Drehle:

The New Mexico Oil Conservation Division (OCD) has reviewed the following EOTT Energy LLC documents, which were submitted to the OCD by EOTT's consultant Environmental Technology Group, Inc (ETGI.)

- April 2001 "ANNUAL MONITORING REPORT, EOTT PIPELINE COMPANY, TNM 97-16, LEA COUNTY, NEW MEXICO."
- April 2003 "ANNUAL MONITORING REPORT, EOTT ENERGY, LLC, TNM 97-16, NE ¼ NW ¼ OF SECTION 12, TOWNSHIP 24 NORTH, RANGE 37 EAST, LEA COUNTY NEW MEXICO"

These documents contain the results of ETGI's ground water monitoring activities of a single monitoring well on this site. Quarterly sampling since January 1999 has shown the ground water to be in compliance with New Mexico Water Quality Control Commission (WQCC) standards as demonstrated in twenty one consecutive sampling events.

The closure for this site **is approved on the condition that the monitor wells be properly plugged and abandoned according to standard industry practices.**

Please be advised that OCD approval does not relieve EOTT of responsibility if remaining contaminants are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state, tribal or local laws and regulations. If you have any questions, please email me or call me at (505) 476-3493.

Sincerely,

Randolph Bayliss, P.E.
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

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 13, 2000

Ms. Becky Jo Doom
HCR 68 Box 188
Jal, New Mexico 88252

RE: TNM-97-16 SITE
LEA COUNTY, NEW MEXICO

Dear Ms. Doom:

The New Mexico Oil Conservation Division (OCD) is in receipt of your January 12, 2000 and February 28, 2000 correspondences about ground water contamination related to a crude oil pipeline spill at EOTT Energy Pipeline Limited Partnership's (EOTT) TNM-97-16 site. Your correspondences express your concern over the validity of the analytical tests of ground water samples and that chloride analyses have not been conducted.

There are a number of reports on the investigation and remediation of contamination at the site. A review of these reports shows that EOTT has followed appropriate protocols for sampling and analyzing ground water samples as required by the OCD, and that the contamination was limited to the general area of the leak. In reference to your concerns about chloride contamination of the ground water, EOTT was required by the OCD to analyze ground water samples at the leak site for chlorides. Enclosed is a copy of this chlorides analysis. The samples showed that there was no chloride contamination in excess of the New Mexico Water Quality Control Commission ground water standard of 250 mg/l for chlorides. Since the leak site did not contaminate ground water with chlorides, the OCD did not require EOTT to sample your windmill for chlorides.

EOTT will continue to remediate and monitor soil and ground water contamination at the site under the oversight of the OCD until the site has been remediated. If you wish to review any of the documents on the extent of contamination or the remedial actions taken, they are available for public review at either the OCD Hobbs District Office or the OCD Santa Fe Office.

As stated during our February 17, 2000 telephone conversation, the OCD will send you copies of all future correspondence that the OCD sends to EOTT so that you can be kept informed of actions at the site.

If you have any further questions or comments, please feel free to contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

enclosure

xc w/o enclosure: Chris Williams, OCD Hobbs District Office
Glen Waldrop, EOTT

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 13, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-572-914

Mr. Glen Waldrop
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: TNM-97-16 SITE
LEA COUNTY, NEW MEXICO

Dear Mr. Waldrop:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) January 5, 2000 "TNM-97-16 GROUND WATER INVESTIGATIONS, LEA COUNTY, NEW MEXICO". This document contains the results of EOTT's investigation of the extent of soil and ground water work contamination related to a crude oil spill at EOTT's TNM-97-16 site located in Section 12, Township 24 South, Range 37 East. The document also contains a recommended work plan for remediation of remaining contaminated soils and monitoring of ground water quality.

The above referenced work plan for the TNM-97-16 site **is approved with the following conditions**:

1. All soil and ground water samples shall be sampled and analyzed using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

2. Quarterly ground water quality monitoring shall include sampling and analysis of the adjacent South Windmill for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX).

3. All wastes generated during the investigation and remediation activities shall be disposed of at an OCD approved facility.

4. The OCD does not require that EOTT analyze ground water samples for concentrations of total petroleum hydrocarbons (TPH) since the New Mexico Water Quality Control Commission does not have a standard for TPH in ground water.

5. EOTT shall submit an annual report which contains the results of the all monitoring and remediation activities. The report shall be submitted to the OCD Santa Fe Office by April 1 of each year with a copy provided to the OCD Hobbs District Office and shall include the following information:

   a. A description of all monitoring and remediation activities which occurred during the last calendar year including conclusions and recommendations.

   b. A water table potentiometric map showing the location of the pipeline, spills, excavated areas, monitor wells, windmills, soil borings, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.

   c. Isopleth maps for contaminants of concern which were observed during the investigations.

   d. Summary tables of all soil and ground water quality sampling results obtained during the investigation and copies of all laboratory analytical data sheets and associated QA/QC data.

   e. The disposition of all wastes generated.

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

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

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Becky Jo Doom

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

FEDERAL EXPRESS
AIR BILL # 8170 0342 3660

March 30, 2000

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
Attn: William Olson

RE: **ANNUAL GROUND WATER MONITORING REPORTS**

Dear Mr. Olson:

Attached please find the 2000 Annual Groundwater Monitoring Reports for the following sites:

Monument #18	Monument #10
Monument #17	TNM-97-16 (Becky Jo Doom site)
Monument #2	HDO-90-23
Monument #15	SPS-11
TNM-97-17	TNM-98-02
TNM-97-18	TNM-98-S01
TNM-98-05A	TNM-97-23
TNM-96-16	TNM-95-10 (Saunders)
TNM-97-14	TNM-97-04 (Townsend)

I hope all meets with OCD requirements for closure of the site but if you have any questions, please don't hesitate to call me at 915/684-3467.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

cc: Environmental File

Becky Jo Doom
HCR 68 Box 188
Jal, New Mexico 88252
(505) 395-2877

February 28, 2000

Mr. Bill Olson
2040 South Pacheco
Santa Fe, New Mexico 87505

Dear Mr. Olson:

Since you were nice enough to call me regarding the EOTT site on our property in section 12, township 24 south, range 37 east, I though I would take the opportunity to send you a copy of the letter sent to me by Environmental Technology Group, Inc. regarding the water sampling at the site.

Is there some reason I am missing that there are no tests being taken for sodium chloride?

I don't mean to be a nuisance but the test being done seem to me to inadequate. Thank you so much for any help.

Sincerely,

Becky Jo Doom

Becky Jo Doom

Enclosures

February 17, 2000

Becky Jo Doom
HCR 68 Box 188
Jal, New Mexico 88252

Dear Mrs Doom:

Environmental Technology Group, Inc. (ETGI) is currently providing environmental consulting services for EOTT Energy Corp. at the release site on your property, as referenced in your letter of January 12, 2000. Mrs. Lennah Frost has asked that I provide the laboratory data for the ground water quality in your windmill water well. In addition, the data that we have collected at the site may provide some useful information about the alluvial aquifer at the site.

The latest ground water sample from your windmill well was collected on September 28, 1999. The latest ground water samples from the site monitoring wells were collected on November 4, 1999. The water samples from all of the site monitoring wells, as well as your water well, have always been non-detect for hydrocarbons. The laboratory report for the sample from your windmill is provided as Attachment A.

From our work at the site, we have learned that the ground water flows to the south-southeast at a slope of approximately 1 foot per 240 feet lateral. Given the material at the water table, it is estimated that the natural flow rate is approximately 10 feet per year. If the ground water were impacted at the release site, the ground water flow would carry the hydrocarbons downgradient to the south-southeast at a rate approximating the above flow rate. Since the site monitoring wells are not impacted and your water well is located some distance from the release, the ground water quality of your well should not be affected by the release in the foreseeable future. However, we will continue to monitor your well, as well as the site monitoring wells on a quarterly basis.

Since hydrocarbons are lighter than water and float on the top of the water table, our work has been primarily concerned with the upper portion of the aquifer and as such, we have not determined the aquifer thickness. The monitoring wells typically penetrate only the top 10 feet of the aquifer. Based on water produced from these wells during the purging process, it is estimated that this 10 foot section should be capable of producing approximately 5 gallons per minute.

If you have any questions regarding this letter, please contact Lennah Frost at (915) 684-3467.

Sincerely:

Jesse Taylor
Principal Geologist

Midland, TX ■ P. O. Box 4845, 79704 ■ Office 915-522-1139 ■ Fax 915-520-4310
The Woodlands, TX ■ P. O. Box 131150, 77393 ■ Office (281) 362-8571 ■ Fax 281-362-8932

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC: 022

Project Manager: JESSE TAYLOR

Phone #: (915) 664-9166

FAX #:

Company Name & Address: ETGI
P.O. BOX 4845 MIDLAND, TX 79704

Project #: TNM 97-16

Project Name: —

Project Location: LEA COUNTY, NM

Sampler Signature: Ken Dutton

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021B/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI	TPH 8015 DRO/GRO
20401	SOUTH WINDMILL	3	1.5	X					X		X			9-28	0950	X								X

Relinquished by:	Date:	Times:	Received by:
Ken Dutton	28 SEP 99	1:00 PM	
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS: MAIL RESULTS
KEN DUTTON
1606 W. CALLE SUR, APT B
HOBBS, NM 88240-4985

INVOICE: LINWAN FROST PO# 1015M

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: TNM 97-16
Project Name: None Given
Project Location: Lea Co., N.M.

Sampling Date: 09/28/99
Receiving Date: 09/28/99
Analysis Date: BTEX 9/29/99

ELT#	FIELD CODE/SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
20401	South Windmill	<0.001	<0.001	<0.001	<0.001	<0.001
	% IA	95	91	89	91	90
	% EA	96	91	92	91	91
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8020,5030

Raland K. Tuttle

10-1-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: TNM 97-16
Project Name: None Given
Project Location: Lea County, N.M.

Sampling Date: 09/28/99
Receiving Date: 09/28/99
Analysis Date: 09/30/99

ELT#	FIELD CODE	GRO C6-C10 (mg/L)	DRO >C10-C25 (mg/L)
20401	South Windmill	<0.5	<0.5
	%INSTRUMENT ACCURACY	102	101
	% EXTRACTION ACCURACY	106	114
	BLANK	<0.5	<0.5

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

10-1-99
Date

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal	Time 1030	Date 2/17/00

Originating Party	Other Parties
Bill Olson - OCD	Becky Jo Doom

Subject

TNM-97-16 Leak Site

Discussion

Informed her that EOTT working with OCD on remediation of soil and ground water contamination she is concerned about the validity of their recent tests.

Conclusions or Agreements

OCD will copy her on all correspondence sent to EOTT.

Distribution

Signed Bill Olson

Becky Jo Doom
HCR 68 Box 188
Jal, New Mexico 88252

JAN 18 2000

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
ATTN: Mr. William Olson

Re TNM-97-16 Ground Water Investigations
Lea County, NM

Dear Mr. Olson:

I have met you at a couple of OCD meetings in Hobbs and am presuming on your offer of help to write you regarding the situation above listed. I don't know just what you may know about the situation or what you may have been told.

The oil pipeline leak was from an old Texas-New Mexico Pipeline line and seems to have been an old, on-going leak they had not found. It was a gravity line from the north going to their tank farm south of Jal and there were no block valves on said line, I am told.

This line is in the bottom of Monument Draw, at least on our property. Ground water is not too prevalent in our area and this is shallow and fairly strong. We pump a windmill up on the side of the draw from thirty-five feet and I was told the water was only fifteen feet from surface in the bottom. There is an old, abandoned prarie dog town at the leak site. The oil had permeated in lots of directions.

I am concerned about the validity of the tests being conducted. A gentleman doing the tests told me there is sixty feet of ground water, which I find hard to believe. And I am wondering if they are using valid tests.

They are, of course, eager to close the site. I am eager for them to close it safely regarding the soil and water. I do have a contract in which they are to return the surface to a stand of grass and the water is to be tested of equal quality as before.

Thank you so much for any help you may give me in this matter.

Sincerely,

Becky Jo Doom

Becky Jo Doom 1-12-00

(505) 395-2877

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

January 5, 2000

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
Attn: William Olson

RE: **TNM-97-16 GROUND WATER INVESTIGATIONS**
LEA CO., NM

Dear Mr. Olson:

As per your letter dated December 22, 1999, attached please find EOTT's additional Subsurface Investigation Report and Modified Stage 2 Abatement Plan for the above captioned leaksite. This should meet and/or exceed the requirements set out in your letter.

I hope all meets with OCD approval but if you have any questions, please don't hesitate to call.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

/attachments

cc: NMOCD - Hobbs

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

December 22, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-745

Ms. Lennah Frost
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: TNM-97-16 GROUND WATER INVESTIGATIONS
LEA COUNTY, NEW MEXICO

Dear Ms. Frost:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) October 4, 1999 "ADDITIONAL DATA REQUIRED TO COMPLETE STAGE 1 ABATEMENT PLANS FOR THE FOLLOWING SITES: SPS-11 LEA COUNTY, NEW MEXICO; TNM-98-05A LEA COUNTY, NEW MEXICO; TNM-97-14 LEA COUNTY, NEW MEXICO; TNM-97-16 LEA COUNTY, NEW MEXICO; TNM-97-17 LEA COUNTY, NEW MEXICO; TNM-97-18 LEA COUNTY, NEW MEXICO". This document, which was submitted on behalf of EOTT by their consultant Environmental Technology Group, Inc., contains EOTT's work plans for installation of additional monitor wells at a number of EOTT crude oil pipeline spill sites.

The above referenced work plan for the TNM-97-16 site **is approved with the following conditions**:

1. EOTT shall complete new monitor wells as follows:

   a. At least 15 feet of well screen shall be placed across the water table interface with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table.

   b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

c. A 2-3 foot bentonite plug shall be placed in the annulus above the gravel pack.

d. The remainder of the annulus shall be grouted to the surface with cement containing 3-5% bentonite.

e. A concrete pad and locking well cover shall be placed at the surface.

f. The well shall be developed after construction using EPA approved procedures.

2. EOTT shall wait a minimum of 24 hours after the monitor wells have been developed to purge and sample ground water from the monitor wells.

3. All soil and ground water samples shall be sampled and analyzed using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

4. All wastes generated during the investigation and remediation activities shall be disposed of at an OCD approved facility.

5. EOTT shall submit a report which contains the results of the investigation activities. The report shall be submitted to the OCD Santa Fe Office by February 25, 2000 with a copy provided to the OCD Hobbs District Office and shall include the following information:

   a. A description of all investigation activities which occurred including conclusions and recommendations.

   b. A geologic/lithologic log and well completion diagram for each monitor well and soil boring.

   c. A water table potentiometric map showing the location of spills, excavated areas, monitor wells, soil borings, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.

   d. Isopleth maps for contaminants of concern which were observed during the investigations.

   e. Summary tables of all soil and ground water quality sampling results obtained during the investigation and copies of all laboratory analytical data sheets and associated QA/QC data.

   f. The disposition of all wastes generated.

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

The OCD requires that in the future EOTT submit separate work plans and reports for each site since some of the sites are being remediated under different rules and regulations.

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

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Jesse Taylor, Environmental Technology Group, Inc.

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761 → 684-3400

October 15, 1999

RECEIVED
OCT 25 1999
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

State of New Mexico
Oil Conservation Division - Hobbs District Office
1625 N. French Dr.
Hobbs, NM 88240
Attn: Donna Williams

RE: Installation of Additional Monitor Wells in Lea County, NM

Dear Ms. Williams:

Below is a list of old Texas-New Mexico Pipeline sites that require additional monitor wells to be installed. Also on this list are 3 EOTT sites that require additional and/or new monitor wells.

TNM - SPS-11	TNM - 98-05A
TNM - 97-14	TNM - 97-16
TNM - 97-17	TNM - 97-18
EOTT - Darr Angell site #1	
EOTT - Darr Angell site #2	
EOTT - leak #TNM-LF-59	

We will begin drilling these wells on Monday, October 25, 1999 and will proceed from site to site on a geographic basis. The SPS-11 site is scheduled first. I will be out of town that week but Wayne Brunette will be coordinating drilling activity with our contractor Jerry Nickell and Allan Eades of Eades Drilling. Wayne's number is 915/556-0190. If you would like to be present at any of these installations, please contact Wayne to verify time and locations for each day's drilling.

Donna, I hope this meets with your approval but if you have any questions or need additional information, please don't hesitate to call me.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

cc: William Olson - NMOCD - Santa Fe
Wayne Brunette
Glenn Waldrop

October 4, 1999

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

BY CERTIFIED MAIL
RETURN RECEIPT NO.
Z 203 735 137

Attn: William Olson

RE: Additional Data Required to Complete Stage 1 Abatement Plans for the Following Sites:

- **SPS-11 Lea County, New Mexico**
- **TNM-98-05A Lea County, New Mexico**
- **TNM-97-14 Lea County, New Mexico**
- **TNM-97-16 Lea County, New Mexico**
- **TNM-97-17 Lea County, New Mexico**
- **TNM-97-18 Lea county, New Mexico**

Dear Mr. Olson:

EOTT Energy Corporation (EOTT) has requested that Environmental Technology Group, Incorporated (ETGI) assist them in field activities and the acquisition of additional data at the referenced sites. The additional field activities consist primarily in the completion of additional soil borings and/or ground water monitoring wells at these sites to either document soil and ground water conditions at the release point or define the lateral extent of ground water impact. In order to minimize cost and maximize efficiency, ETGI would like to conduct these similar tasks in sequence.

As such, on the behalf of EOTT, ETGI request the approval for the following work plans for each site. The work plans are designed to allow for the collection data required to complete a Stage 1 Abatement Plan for each site. In addition, a generalized summary of our Quality Assurance/Quality Control (QA/QC) Plan is provided as Attachment A. These protocol will be applicable to all the referenced sites.

Once the following work plans are approved, ETGI will initiate field activities within 14 days and complete the field work within 14 days subsequent to initiation. Individual Stage 1 Abatement Plans will be submitted to your agency within 60 days of the completion of the field work. Subsequent to your approval of each Stage 1 Abatement Plan, a Stage 2 Abatement Plan will be completed for each site within 60 days, or 120 days with good cause. Quarterly ground water monitoring, at all of the referenced sites, will continue as previously approved by your agency.

All of the sites are located in Lea County, New Mexico, which is situated in the southeast portion of the state. The area is located in the geologic province commonly known as the Permian Sedimentary Basin from which oil and gas are produced from various Permian and Pennsylvanian age Formations. Generally, all of the sites are located in sparsely populated, semi-arid terrain common to the basin. Topographically, the area ranges from flat to rolling hills or draws containing intermittent streams. Ground water at the sites range from 40 to 60 feet below the ground surface (bgs). The site locations are depicted on Figure 1 and individual site maps are provided in the subsequent figures, all of which are in Attachment B.

SPS-11

A review of the file for this site indicates that ground water samples, collected from down gradient monitoring well, MW-17, have contained benzene in excess of regulatory limits for several monitoring events. The soil and groundwater data indicate the possibility of multiple release events and locations. Regardless of the site's past release history, the down gradient extent of impacted ground water is currently not defined.

ETGI recommends the installation of an estimated three to five additional wells, located down gradient to monitoring well MW-17. The initial well will be placed approximately 200 feet southeast of monitoring well MW-17 and subsequent well locations will be based on field data collected from the initial well. The stated goal of the well placement selection will be to define the cross gradient and down gradient extent of the plume associated with monitoring well MW-17. A site map is provided as Figure 2.

TNM-98-05A

A review of the file for this site indicates that the four existing monitoring wells do not adequately define the extent of impacted soil, free phase product or dissolved phase hydrocarbons in the ground water. As much as 3.36 feet of product has been measured in monitoring well MW-2, which represents the most down gradient well in the western portion of the site. In addition, impacted soil was collected from the boring advanced for the well. Dissolved phase benzene concentrations, in excess of regulatory standards, have been detected in samples collected from monitoring well MW-4. This well represents the most down gradient well in the eastern portion of the site.

ETGI recommends that approximately eight geoprobe borings be advanced around the release point to more completely characterize the extent of impacted soil remaining subsequent to the excavation. An estimated minimum of five monitoring wells will be required to define the lateral extent of impacted ground water. These include:

- One - up gradient well, north of monitoring well MW-1;
- Two - cross gradient wells, west of monitoring well MW-2 and east of monitoring well MW-4; and

- Two - downgradient wells, south of monitoring well MW-2 and south of monitoring well MW-4.

Field data from the initial proposed wells may modify the exact locations, however, the stated purpose of the well location selection is to define the lateral extent of impacted ground water associated with the release. The proposed monitoring well points are depicted on Figure 3

TNM-97-14

A review of the file for this site indicates that there is no monitoring well located near the release point. ETGI recommends that one monitoring well be installed within 20 feet of the southwest corner of the excavation. If highly impacted soil is present in the boring, approximately four geoprobe borings will be installed in the area to determine the lateral extent of impacted soil remaining subsequent to the excavation. The proposed monitoring well location is depicted on Figure 4.

TNM 97-16

A geoprobe survey is under way at the site to determine the extent of impacted soil remaining subsequent to the excavation has been determined. ETGI recommends that one additional monitoring well be installed near the release point. In addition, a representative soil sample, from each 2,000 cubic yards of the land farm soil has been collected in order to characterize the present condition of the soil. The location of the proposed monitoring well is depicted on Figure-5.

TNM 97-17

A review of the file for this site indicates that there is no ground water monitoring well installed near the release point. ETGI recommends that one ground water monitoring well should be installed between soil boring SB-1 and the release point as depicted on Figure 6.

TNM 97-18

A review of the file for this site indicates that there is no ground water monitoring well installed near the release area and that ground water samples collected from down gradient well MW-3 exceed regulatory standards for dissolved phase benzene. ETGI recommends that one well should be installed in the release area and that two wells should be installed down gradient of monitoring well MW-3 as depicted on Figure 7.

If you have any questions or concerning any of the activities or scheduling proposed in this letter, please contact Lennah Frost, of EOTT Energy Corp. at (915) 684-3467.

Sincerely:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.

Jesse Taylor
Principal Geologist

cc: Lennah Frost - EOTT Energy Corporation

Attachment

ATTACHMENT A

ETGI QA/QC PROCEDURES

Soil Sampling

Samples of subsurface soils will be obtained utilizing either a split spoon sampler (air rotary drilling rig) or a two inch, continuous sampling tube with a clean polybuterate liner (geoprobe). Representative soil samples will be divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample will be placed in a disposable sample bag. The bag will be labeled and sealed for head-space analysis using a photo-ionization detector (PID) calibrated to a 100 ppm isobutylene standard. Each sample will be allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container will be filled to capacity to limit the amount of head-space present. Each container will be labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler will be sealed for shipment to the laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

Soil samples will be delivered to Environmental Lab of Texas, Inc. in Midland, Texas for BTEX and TPH analyses using the methods described below. Soil samples will be analyzed for BTEX and TPH-DRO within fourteen days following the collection date.

The soil samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8020, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

Ground Water Sampling

Monitoring wells will be developed and purged with a clean PVC bailer. The bailer will be cleaned prior to each use with Liqui-Nox detergent and rinsed with distilled water. Monitoring wells with sufficient recharge will be purged by removing a minimum of three
well volumes. Monitoring wells that do not recharge sufficiently will be purged until no additional ground water can be obtained.

After purging the wells, ground water samples will be collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Ground water sample containers will be filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers will be filled first and PAH containers second).

Ground water samples collected for BTEX analysis will be placed in 40 ml glass VOA vials equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory. The vials will be filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles.

Ground water samples collected for PAH analysis will be filled to capacity in sterile, 1 liter glass containers equipped with Teflon-lined caps. Ground water samples collected for metals analysis will be filled to capacity in sterile, 1 liter plastic containers equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory.

The filled containers will be labeled and placed on ice in an insulated cooler. The cooler will be sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

The ground water samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8020, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

Decontamination Of Equipment

Cleaning of drilling equipment will be the responsibility of the drilling company. In general, the cleaning procedures will consist of using high pressure steam to wash the drilling and sampling equipment prior to drilling and prior to starting each hole. Prior to use, the sampling equipment will be cleaned with Liqui-Nox detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures. These procedures will either be transmitted with the laboratory reports or on file at the laboratory.

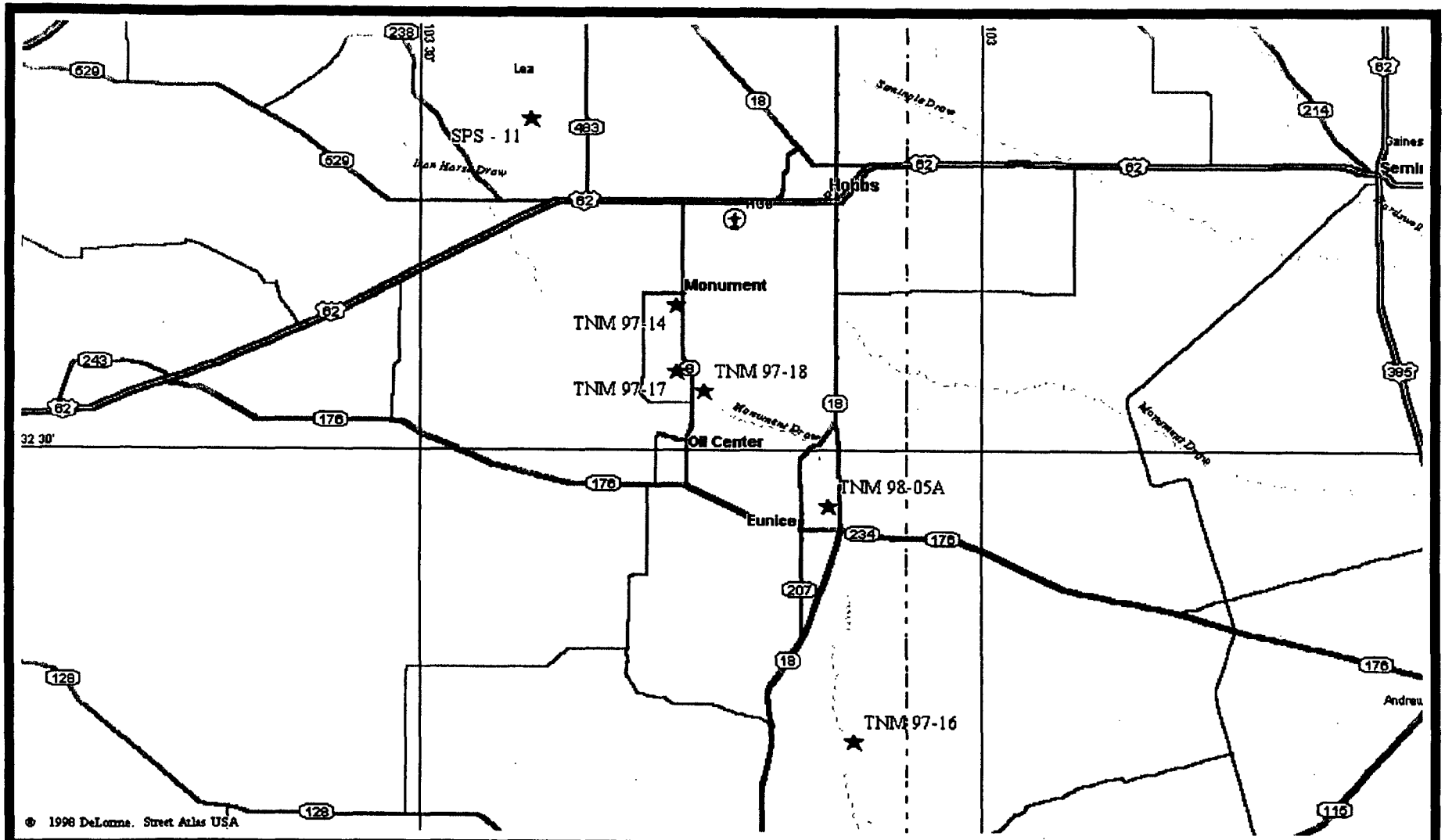
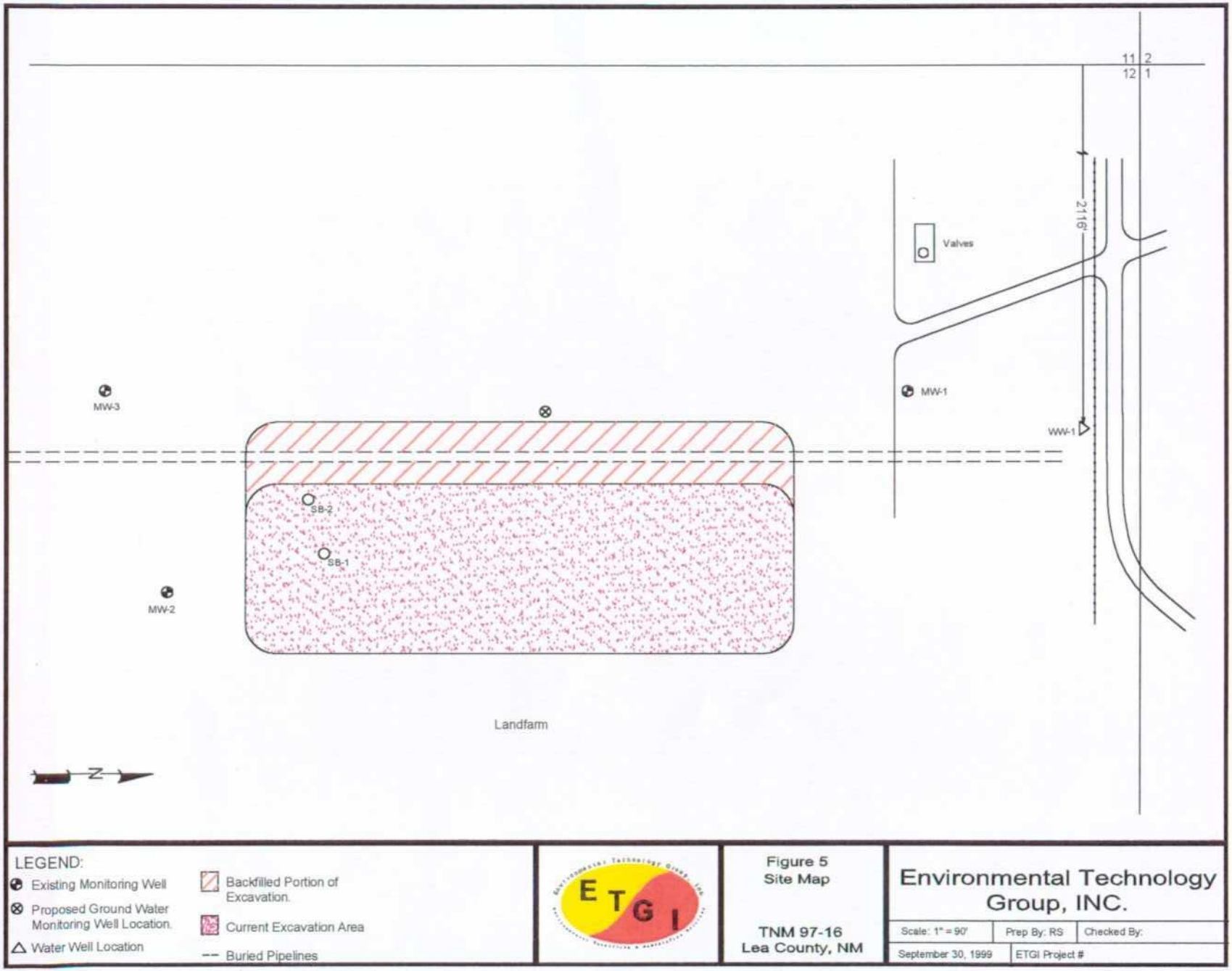


FIGURE 1	Referenced Site Locations	Environmental Technology Group, INC.
Not To Scale	Lea County, NM	9 - 28 - 99 RS



LEGEND:

- Existing Monitoring Well
- Proposed Ground Water Monitoring Well Location.
- Water Well Location
- Backfilled Portion of Excavation.
- Current Excavation Area
- Buried Pipelines

Figure 5
Site Map

TNM 97-16
Lea County, NM

Environmental Technology Group, INC.

Scale: 1" = 90'	Prep By: RS	Checked By:
September 30, 1999	ETGI Project #	

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

January 28, 1999

CERTIFIED MAIL
RETURN RECEIPT NO: Z-274-520-605

Mr. Tony Savoie
Texas-New Mexico Pipe Line Company
P.O. Box 1030
Jal, New Mexico 88252

RE: SOIL AND GROUND WATER CONTAMINATION
TNM-97-16 SITE

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has reviewed Texas-Mexico Pipe Line Company's (TNMPLC) October 29, 1998 "REMEDIATION WORK PLAN, TNM-97-16, UNIT C, SECTION 12, TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO, KEI JOB NO. 710034-1" which was submitted on behalf of TNMPLC by their consultant KEI. This document contains the results of TNMPLC's investigation and remediation activities at the TNM-97-16 pipeline spill site. The document also contains a work plan for additional soil remediation and ground water monitoring.

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

1. TNMPLC will submit all of the remediation, investigation and quarterly monitoring activities in an annual report to the OCD. The report will be submitted to the OCD Santa Fe Office by December 31, 1999 with a copy provided to the OCD Hobbs District Office. The report will contain:

   a. A description of all past and present investigation and remedial actions including discussion of the results as well as conclusions and recommendations.

   b. Summary tables of all past and present soil/waste and water quality sampling results including copies of recent laboratory analytical data sheets and associated quality assurance/quality control (QA/QC) data. Laboratory analytical data sheets which have been previously submitted to the OCD need only be referenced and do not need to be included in the report.

c. A site map showing the location of all soil/waste sampling points, excavation confirmation samples, boreholes, monitor wells and all relevant site features such as pit locations and spill areas.

d. A ground water potentiometric map created using the water table elevations from all monitor wells. The map will show the direction and magnitude of the hydraulic gradient.

e. Geologic/lithologic logs and well completion diagrams for each borehole and monitor well.

f. Soil and ground water isopleth maps for contaminants of concern such as benzene, BTEX and any other significant contaminants found during the investigations.

g. The disposition of all investigation derived wastes.

h. Any other pertinent information.

2. TNMPLC will notify the OCD at least 24 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.

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

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

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Theresa Nix, KEI

Z 274 520 605

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

Sent to	
Street & Number	
Post Office, State, & ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	