

AP - 39

STAGE 1 & 2 WORKPLANS

DATE:

4/5/2005

Price, Wayne

From: Cwdurrett1@aol.com
Sent: Tuesday, April 05, 2005 6:01 AM
To: WPrice@state.nm.us; Cwilliams@state.nm.us
Cc: neal.goates@conocophillips.com; Stephen.R.Wilson@ConocoPhillips.com; cyancey@maximusa.com
Subject: ConocoPhillips East Vacuum Glorietta Tank Battery Playa (2 of 2)

SW1/4 & SE1/4, Sec 27, T17S, R35E
Lea County, New Mexico

Wayne, attached are the tables, figures, and attachments to the up date and proposed work plan for remediation of the playa located east of ConocoPhillips East Vacuum Glorietta Tank Battery.

Please acknowledge receipt of this e-mail.

This email has been scanned by the MessageLabs Email Security System.
For more information please visit <http://www.messagelabs.com/email>

TABLES

Table I
ConocoPhillips East Vacuum Glorietta, East Tank Battery Playa Soil Analysis
September 14-15, 2004

Boring	Sample Interval	Synthetic Precipitation Leaching Procedure				TPH		Chloride by	SPLP	Moisture
		Benzene	Toluene	Ethylbenzene	Xylene (total)	GRO	TPH	IC (solid)	Chloride	
VG-18	0-10	ND	ND	ND	ND	<1.1	68	970	47.5	8.1
VG-18	10-20	ND	ND	ND	ND	<1.0	<12	384	18.5	2.8
VG-18	20-30	ND	ND	ND	ND	<1.1	<13	734	45.4	6.7
VG-18	40-50	ND	ND	ND	ND	<1.0	77	179	8	2.8
VG-19	0-10	ND	ND	ND	ND	<1.1	110	63.1	3.7	6.6
VG-19	10-20	ND	ND	ND	ND	<1.0	<12	165	8.9	2.2
VG-19	20-30	ND	0.001 J	0.017	0.13	<1.0	<13	237	12.8	4.3
VG-19	40-50	ND	ND	ND	ND	<1.0	44	27.7	1.9 J	4.4
VG-20	0-10	ND	ND	ND	ND	<1.1	18	92	4.5	9.1
VG-20	10-20	ND	ND	6	11	44	2000	634	30.5	4.6
VG-20	20-30	ND	0.002 J	0.032	0.052	340	11000	136	7.3	6.6
VG-20	40-50	ND	ND	ND	ND	17	1800	37.4	2.2	5.2
VG-21	0-10	0.043	0.074	0.05	0.065	180	10000	302	19.2	6.7
VG-21	10-20	0.0008 J	0.002 J	0.045	0.026	170	5300	80.8	4.8	4.5
VG-21	20-30	ND	0.002 J	0.02	0.035	84	3600	211	NA	7.6
VG-21	30-40	NA	NA	NA	NA	NA	NA	391	19.7	6.2
VG-21	40-50	ND	ND	0.004 J	0.009	48	2000	542	27.7	6
VG-22	0-10	ND	ND	ND	ND	<1.1	720	1260	72.1	9.5
VG-22	10-20	ND	ND	ND	ND	<1.0	70	665	30.7	2.9
VG-22	30-40	ND	ND	ND	ND	<1.1	16	1300	78	4.8
VG-22	40-50	ND	ND	ND	ND	<1.0	280	1530	83	4.4
VG-23	0-10	ND	ND	ND	ND	<4.3	670	2690	163	7.3
VG-23	10-20	ND	0.004 J	0.03	0	88	4000	3990	209	6.4
VG-23	20-30	ND	ND	0.009	0.018	110	6500	5170	261	6.8
VG-23	40-50	ND	ND	ND	ND	<1.0	730	3970	222	4.3

All units are in milligrams per kilogram (mg/kg) except for moisture which is in percent (%)

IC Analysis by Inductively Coupled Plasma Ion Chromatography

SPLP Synthetic Precipitation Leaching Procedure

ND Not detected at or above the Laboratory detection limit

NA Not analyzed

J Estimated Value - the result is $\geq$ # than the Method of Determination Limit and $<$ the Limit of Quantification

Table 2
ConocoPhillips East Vacuum Glorieta, East Tank Battery
Playa Groundwater Analysis
September 15, 2004

Constituent	Units	Well VG-1	WQ Standard
Chloride (titrimetric)	mg/l	1,140	250
Volatile Organics			
Benzene	mg/l	0.005	0.01
Toluene	mg/l	ND	0.75
Ethylbenzene	mg/l	ND	0.75
Xylene (Total)	mg/l	ND	0.62
Semivolatile Organics			
Acenaphthene	mg/l	ND	0.0007
Acenaphthylene	mg/l	ND	
Anthracene	mg/l	ND	
Benzo(a)anthracene	mg/l	ND	
Benzo(a)pyrene	mg/l	ND	
Benzo(b)fluoranthene	mg/l	ND	
Benzo(g,h,i)perylene	mg/l	ND	
Benzo(k)fluoranthene	mg/l	ND	
Chrysene	mg/l	ND	
Dibenz(a,h)anthracene	mg/l	ND	
Fluoranthene	mg/l	ND	
Fluorene	mg/l	ND	
Indeno(1,2,3-cd)pyrene	mg/l	ND	
Naphthalene	mg/l	ND	
Phenanthrene	mg/l	ND	
Pyrene	mg/l	ND	

ND = Not detected at or above the laboratory detection limit
mg/l = Milligrams per liter

Table 3
ConocoPhillips East Vacuum Glorieta, East Tank Battery Playa Soil Analysis
December 8, 2004

Parameter	Method	Unit	Excavation Walls*				Excavation Floor
			West	South	East	North	
TPH-DRO	8015B	mg/kg	6,500	10,000	<14	470	13,000
TPH-GRO	8015B	mg/kg	23	190	10	34	260
Moisture	160.3	%	13.9	16.6	16.8	19.5	20.3
Chloride	1312/300	mg/l	3.9	45.6	37.5	37.5	4.2
Benzene	1312/8260	µg/kg	< 5	< 5	< 5	< 5	< 5
Toluene	1312/8260	µg/kg	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	1312/8260	µg/kg	< 5	< 5	< 5	< 5	< 5
Xylene (Total)	1312/8260	µg/kg	< 5	< 5	< 5	< 5	13

mg/kg = Milligrams per kilogram

% = Percent

mg/l = Milligram per liter

µg/kg = micrograms/kilogram

* Locations based on field observations

Table 4
ConocoPhillips East Vacuum Glorietta, East Tank Battery
Playa Groundwater Analysis
January 14, 2005

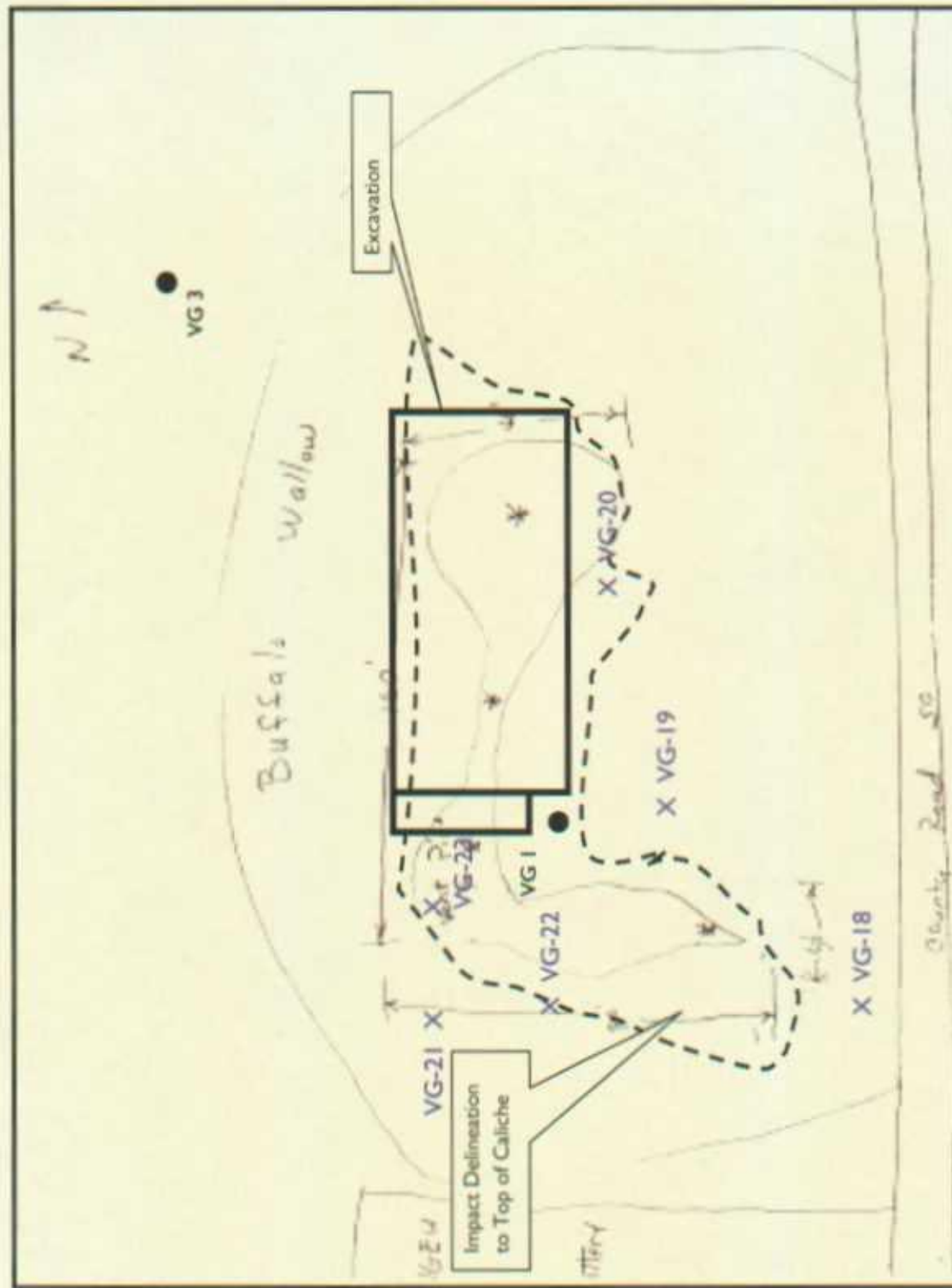
Parameter	Method	Unit	VG-1	VG-2	VG-3	Regulatory Limit
Chloride	300	mg/l	2880	88.3	35.6	250
<u>Volatile Organics</u>	8260B	mg/l				
Benzene			0.752	ND	ND	0.01
Ethylbenzene			0.147	ND	ND	0.75
Toluene			ND	ND	ND	0.75
Xylenes (total)			ND	ND	ND	0.62
<u>Semivolatile Organics</u>	8270C	mg/l				
Acenaphthene			ND	ND	ND	
Acenaphthylene			ND	ND	ND	
Anthracene			ND	ND	ND	
Benzo(a)anthracene			ND	ND	ND	
Benzo(b)fluoranthene			ND	ND	ND	
Benzo(k)fluoranthene			ND	ND	ND	
Benzo(ghi)perylene			ND	ND	ND	
Benzo(a)pyrene			ND	ND	ND	0.0007
Chrysene			ND	ND	ND	
Dibenzo(a,h)anthracene			ND	ND	ND	
Fluoranthene			ND	ND	ND	
Fluorene			0.002816	ND	ND	
Indeno(1,2,3-cd)pyrene			ND	ND	ND	
2-Methylnaphthalene			0.05457	ND	ND	
Naphthalene			0.07128	ND	ND	0.03*
Phenanthrene			0.006317	ND	ND	
Pyrene			ND	ND	ND	
1-Methylnaphthalene			0.07064	ND	ND	

mg/l = Milligrams per liter

ND = Not detected at or above laboratory detection limits

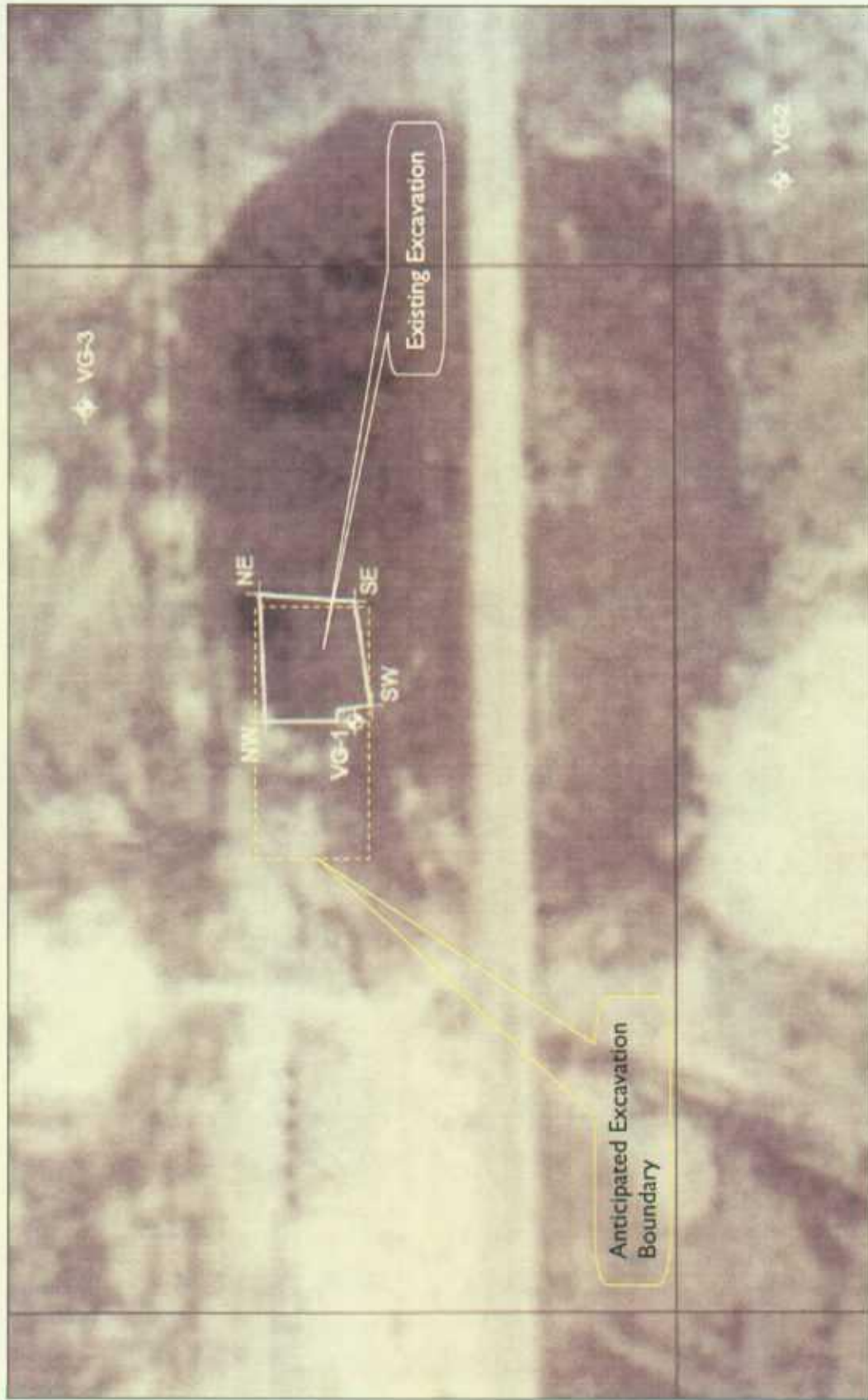
* PAH's total naphthalene plus monomethylnaphthalenes

FIGURES



Base Source: 10/28/2004 NMOCD Form C141 Attachment

MAXIM Technologies	
ConocoPhillips	Vacuum Glorietta East Unit
Figure 1. Spill Footprint & September 2004 Boring Locations	

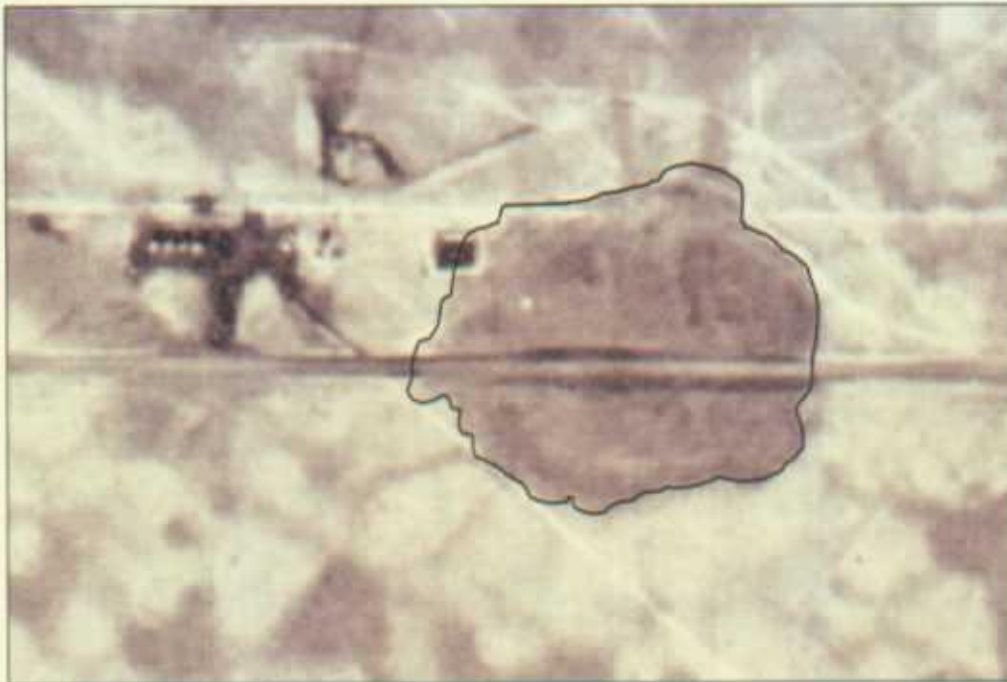


Source: Terraserver: USGS, 1996. 19 km SW of Lovington, New Mexico.

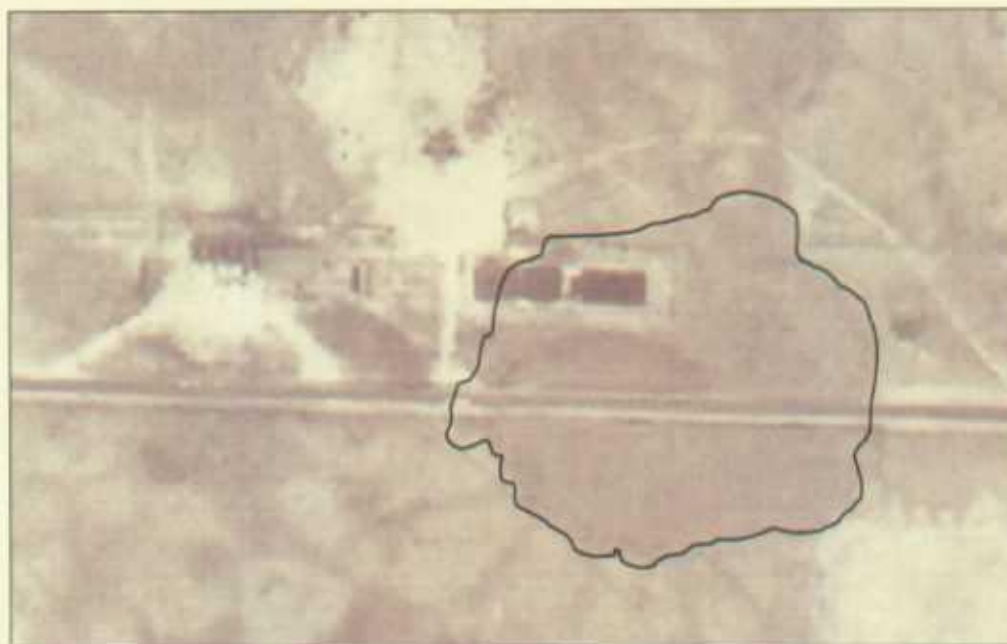
MAXIM Technologies	Vacuum Glorietta East Unit
ConocoPhillips	East Tank Battery Playa Excavation

Figure 2. East Tank Battery Playa Excavation

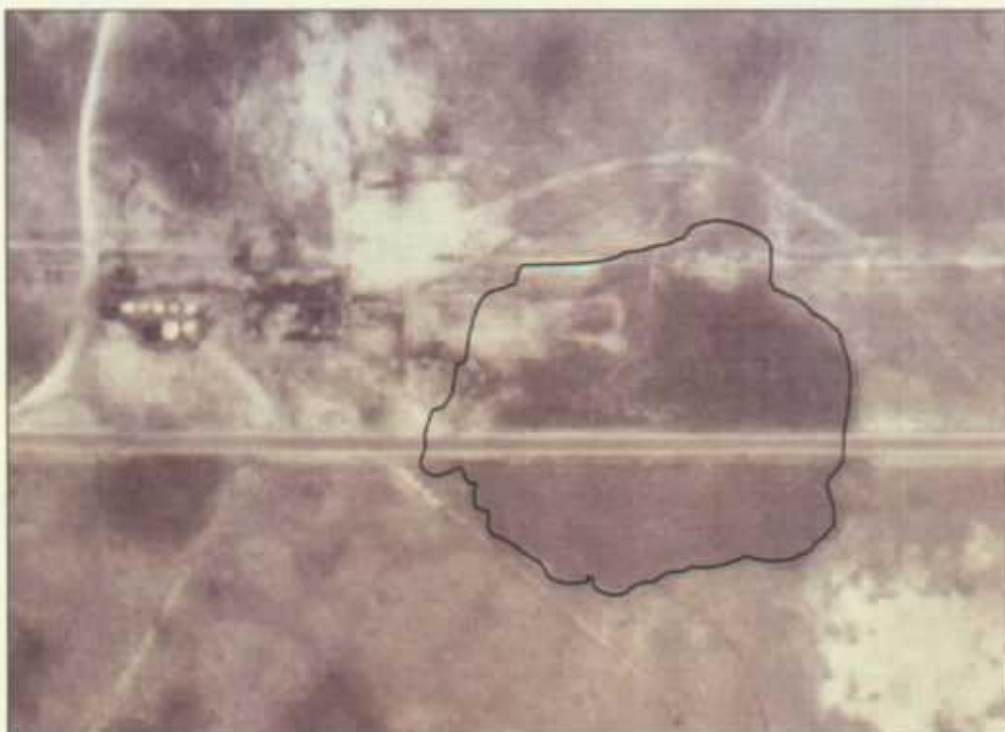
VACUUM GLORIETTA EAST TANK BATTERY PLAYA
PHOTO LOG



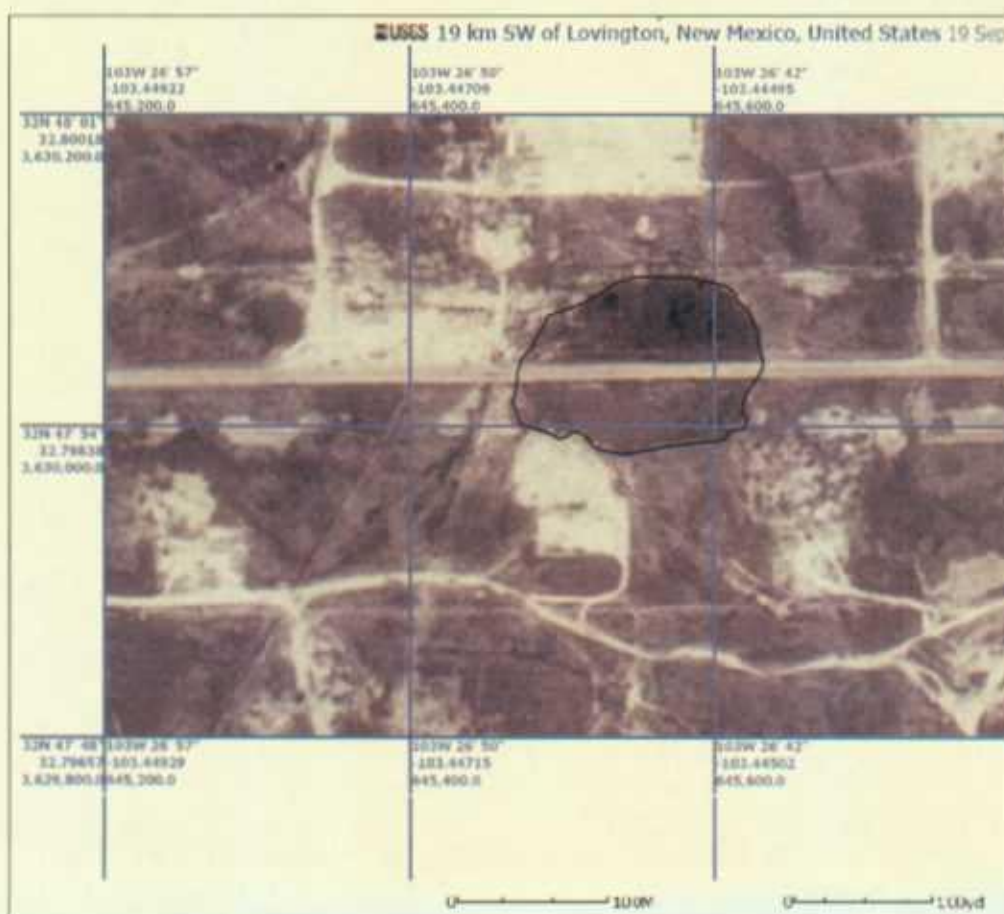
1949



1966



1978



1996