Figures

CAD File:	Drawn By:	Date:	Project No.
F:\\4733\00\47330002.dwg	H. Magaña	01/22/02	4733.00

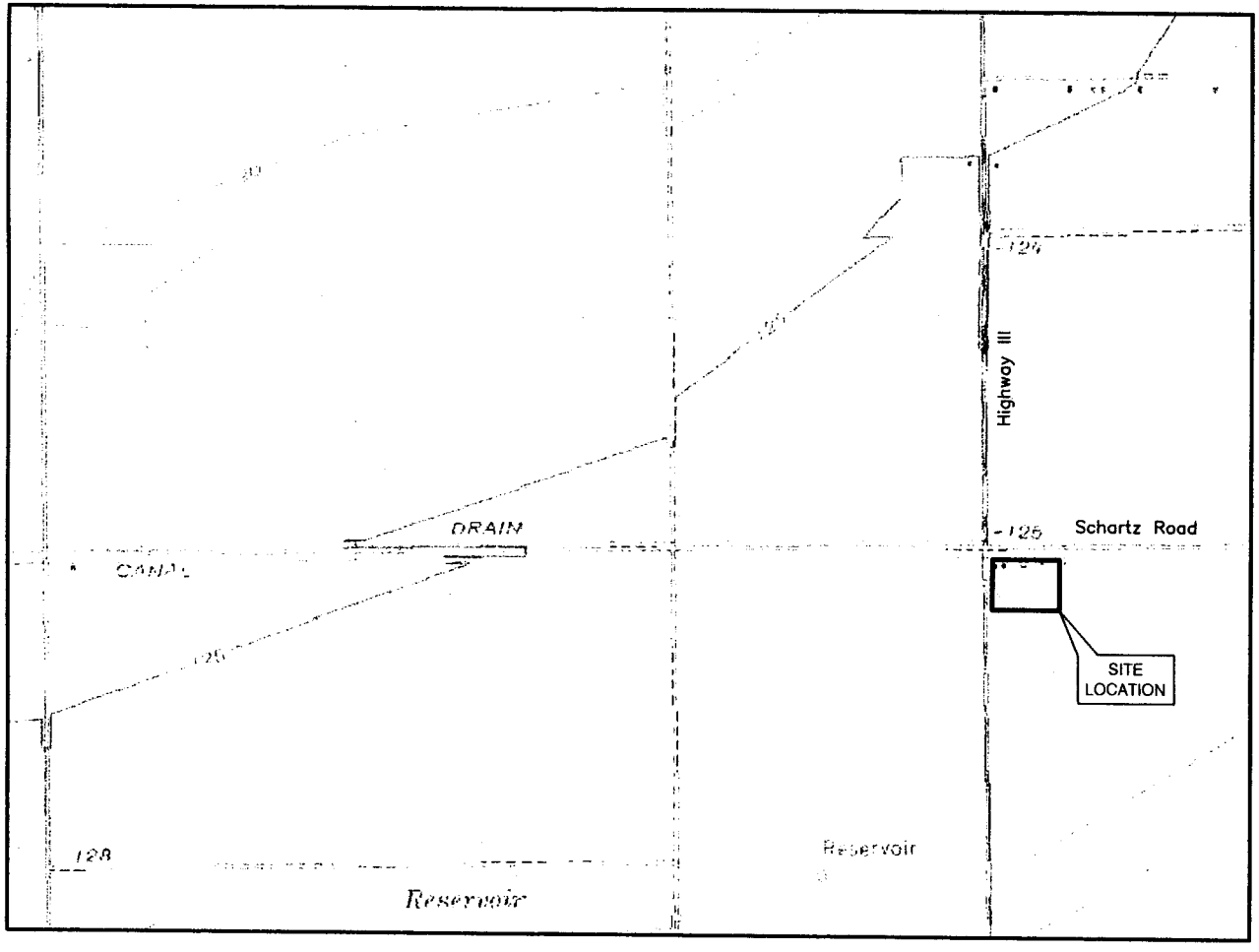
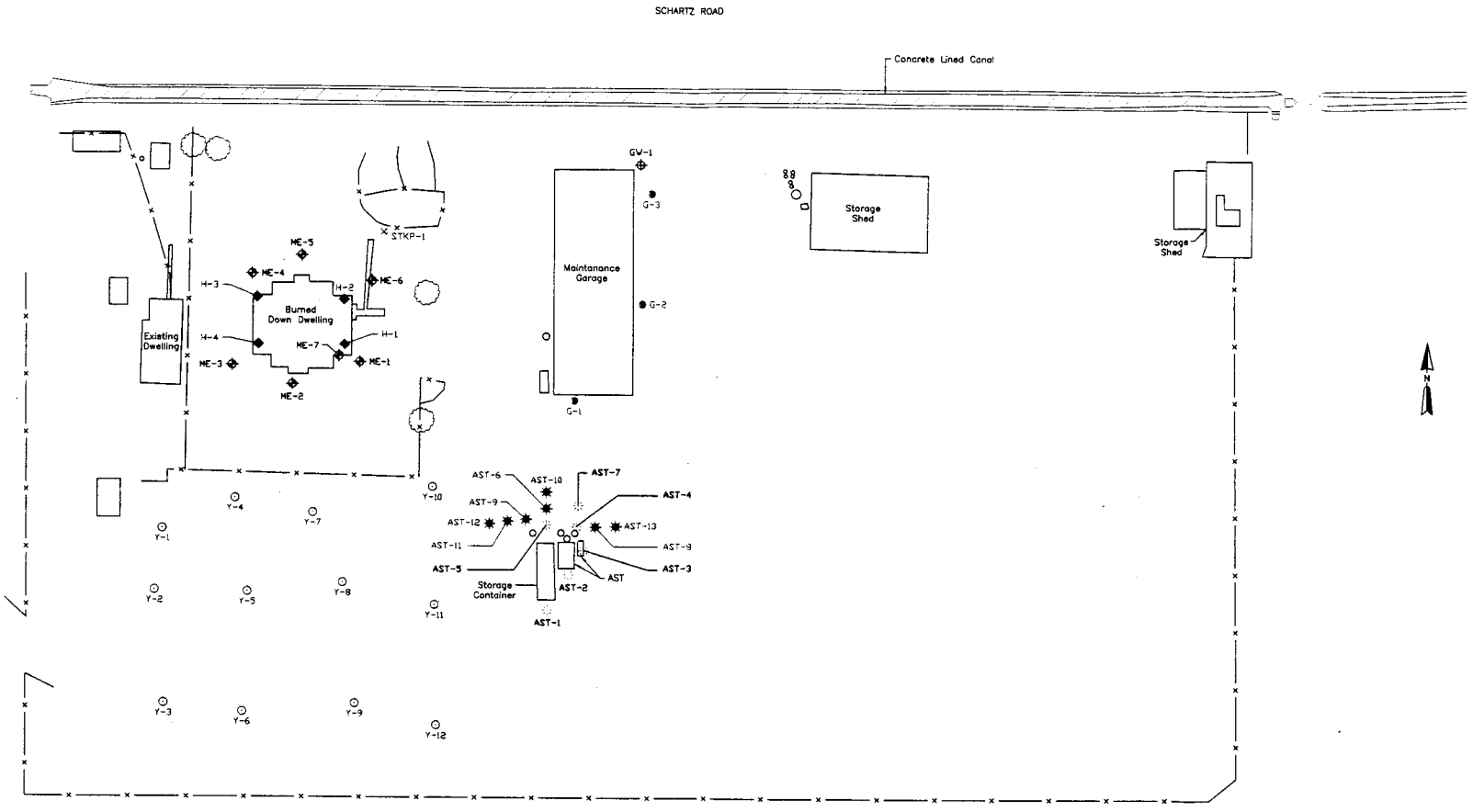


Figure 1
Site Location Map
Hannon Ranch Site
Brawley, Imperial County, CA

ERM *01/02*



LEGEND

G-1	Soil Sample Location	H-1	PSI Grab Soil Sample		Fence
AST-1 to 5 and AST-7	Soil and Water Sample Location	ME-1	ERM Brass Ring Soil Sample		Building
AST-6 to 13	Soil Sample Location	STKP-1	ERM Grab Soil Sample		Tree
Y-10	Shallow Soil Sample Location	GW-1			

0 30' 60' 120'
(APPROXIMATE) SCALE IN FEET

Figure 2
Site Plan Map
Hannon Ranch Site
Brawley, Imperial County, CA

ERM 01/02

CAD File: F:\4733\00\47330005.dwg
Drawn By: H. Magaña
Date: 01/30/02
Project No: 4733.00

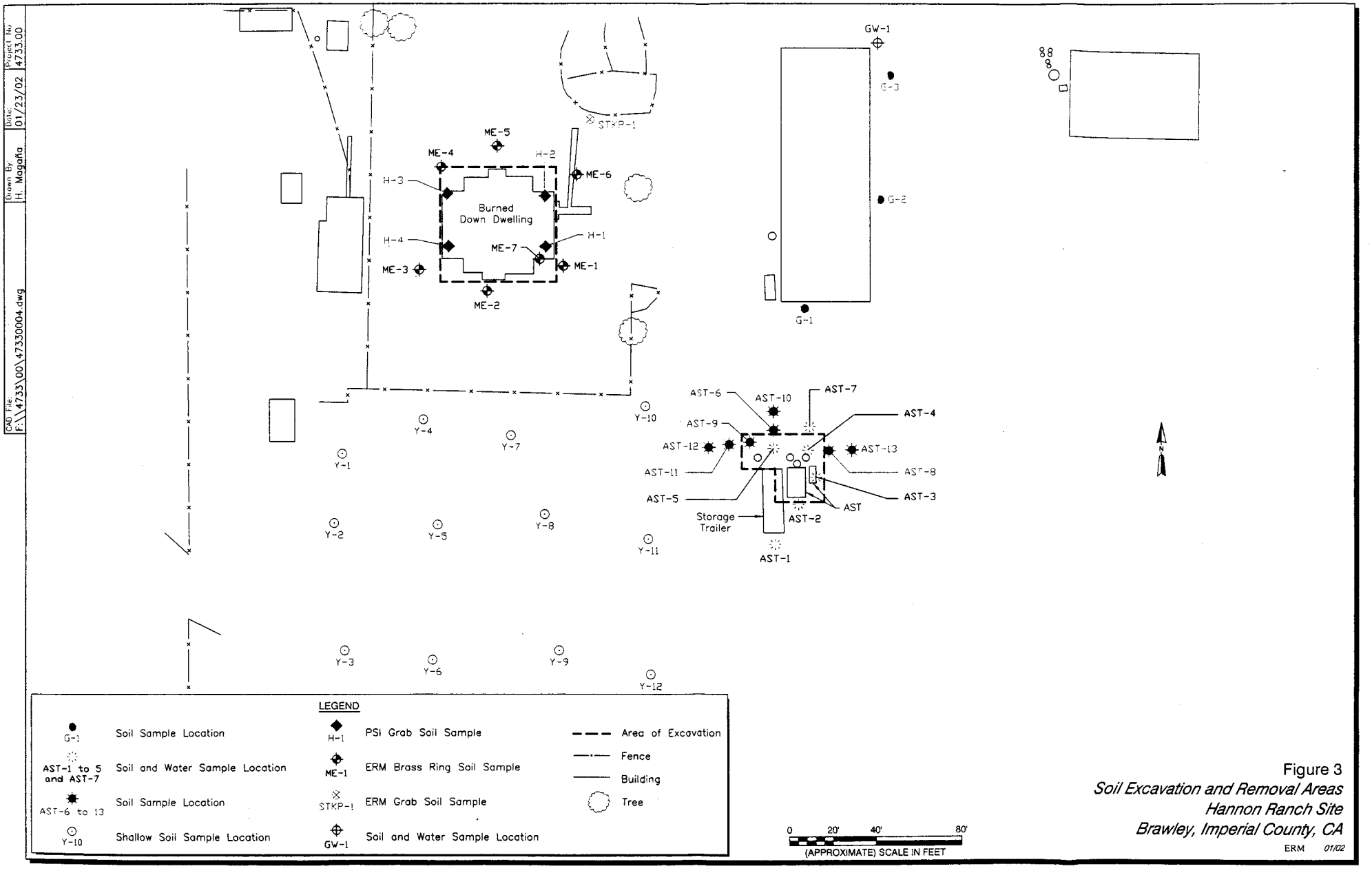
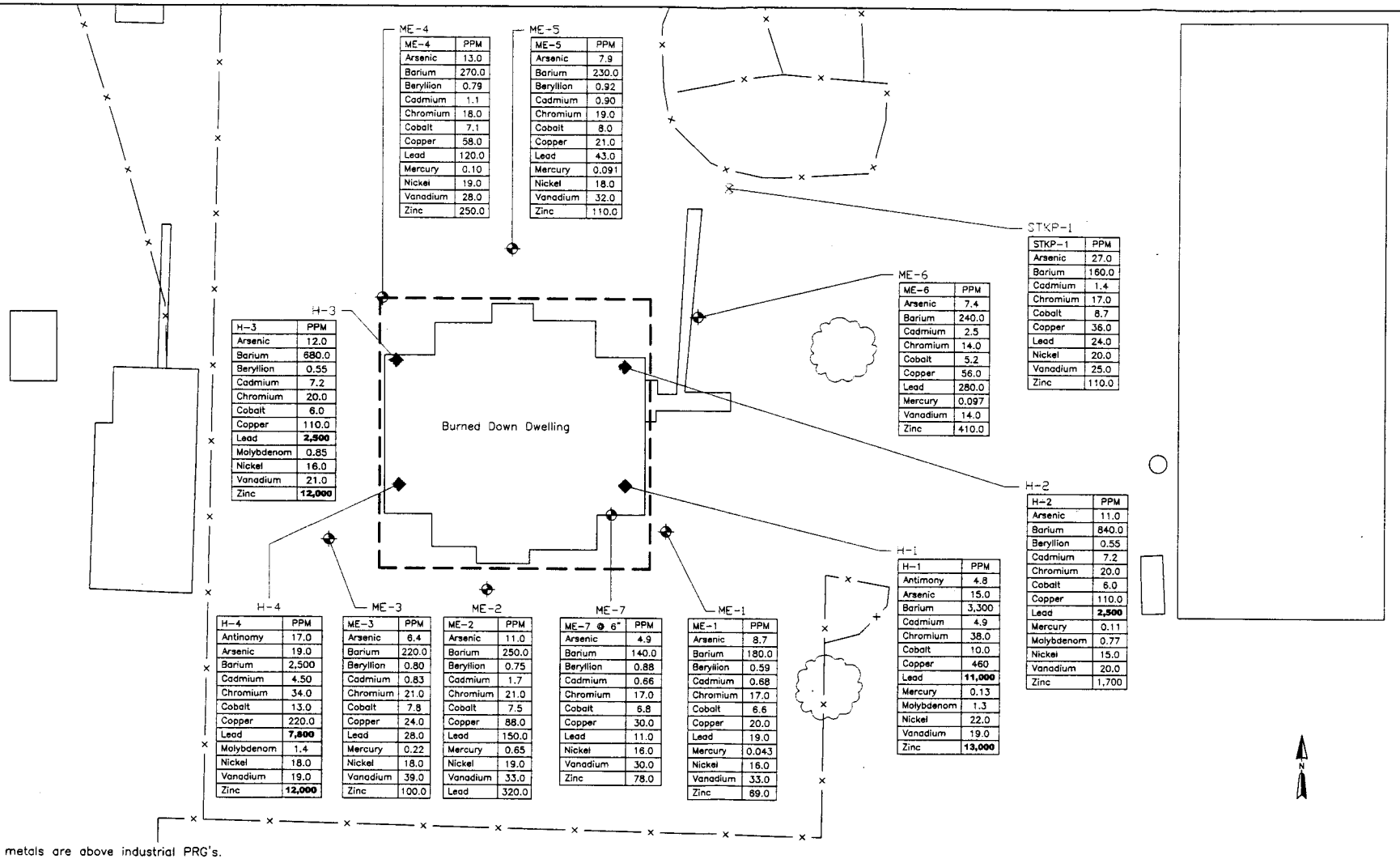


Figure 3
Soil Excavation and Removal Areas
Hannon Ranch Site
Brawley, Imperial County, CA
ERM 01/02



H-3	PPM
Arsenic	12.0
Barium	680.0
Beryllion	0.55
Cadmium	7.2
Chromium	20.0
Cobalt	6.0
Copper	110.0
Lead	**2,500**
Molybdenom	0.85
Nickel	16.0
Vanadium	21.0
Zinc	**12,000**

H-4	PPM
Antinomy	17.0
Arsenic	19.0
Barium	2,500
Cadmium	4.50
Chromium	34.0
Cobalt	13.0
Copper	220.0
Lead	**7,800**
Molybdenom	1.4
Nickel	18.0
Vanadium	19.0
Zinc	**12,000**

ME-3	PPM
Arsenic	6.4
Barium	220.0
Beryllion	0.80
Cadmium	0.83
Chromium	21.0
Cobalt	7.8
Copper	24.0
Lead	28.0
Mercury	0.22
Nickel	18.0
Vanadium	39.0
Zinc	100.0

ME-2	PPM
Arsenic	11.0
Barium	250.0
Beryllion	0.75
Cadmium	1.7
Chromium	21.0
Cobalt	7.5
Copper	88.0
Lead	150.0
Mercury	0.65
Nickel	19.0
Vanadium	33.0
Lead	320.0

ME-7 @ 6"	PPM
Arsenic	4.9
Barium	140.0
Beryllion	0.88
Cadmium	0.66
Chromium	17.0
Cobalt	6.8
Copper	30.0
Lead	11.0
Nickel	16.0
Vanadium	30.0
Zinc	78.0

ME-1	PPM
Arsenic	8.7
Barium	180.0
Beryllion	0.59
Cadmium	0.68
Chromium	17.0
Cobalt	6.6
Copper	20.0
Lead	19.0
Mercury	0.043
Nickel	16.0
Vanadium	33.0
Zinc	69.0

ME-4	PPM
Arsenic	13.0
Barium	270.0
Beryllion	0.79
Cadmium	1.1
Chromium	18.0
Cobalt	7.1
Copper	58.0
Lead	120.0
Mercury	0.10
Nickel	19.0
Vanadium	28.0
Zinc	250.0

ME-5	PPM
Arsenic	7.9
Barium	230.0
Beryllion	0.92
Cadmium	0.90
Chromium	19.0
Cobalt	8.0
Copper	21.0
Lead	43.0
Mercury	0.091
Nickel	18.0
Vanadium	32.0
Zinc	110.0

ME-6	PPM
Arsenic	7.4
Barium	240.0
Cadmium	2.5
Chromium	14.0
Cobalt	5.2
Copper	56.0
Lead	280.0
Mercury	0.097
Vanadium	14.0
Zinc	410.0

STKP-1	PPM
Arsenic	27.0
Barium	160.0
Cadmium	1.4
Chromium	17.0
Cobalt	8.7
Copper	36.0
Lead	24.0
Nickel	20.0
Vanadium	25.0
Zinc	110.0

H-2	PPM
Arsenic	11.0
Barium	840.0
Beryllion	0.55
Cadmium	7.2
Chromium	20.0
Cobalt	6.0
Copper	110.0
Lead	**2,500**
Mercury	0.11
Molybdenom	0.77
Nickel	15.0
Vanadium	20.0
Zinc	1,700

H-1	PPM
Antimony	4.8
Arsenic	15.0
Barium	3,300
Cadmium	4.9
Chromium	38.0
Cobalt	10.0
Copper	460
Lead	**11,000**
Mercury	0.13
Molybdenom	1.3
Nickel	22.0
Vanadium	19.0
Zinc	**13,000**

NOTE:
Highlighted metals are above industrial PRG's.

LEGEND

- H-1 — PSI Grab Soil Sample
- ME-1 — ERM Brass Ring Soil Sample
- STKP-1 — ERM Grab Soil Sample
- Area of Excavation
- Fence
- Building
- Tree

0 10' 20' 40'
(APPROXIMATE) SCALE IN FEET

Figure 4
Analytical Results for Metal
Near the Burned Down Dwelling
Hannon Ranch Site
Brawley, Imperial County, CA

ERM 01/02

CAD File: F:\4733\00\47330003.dwg
Drawn By: H. Magaña
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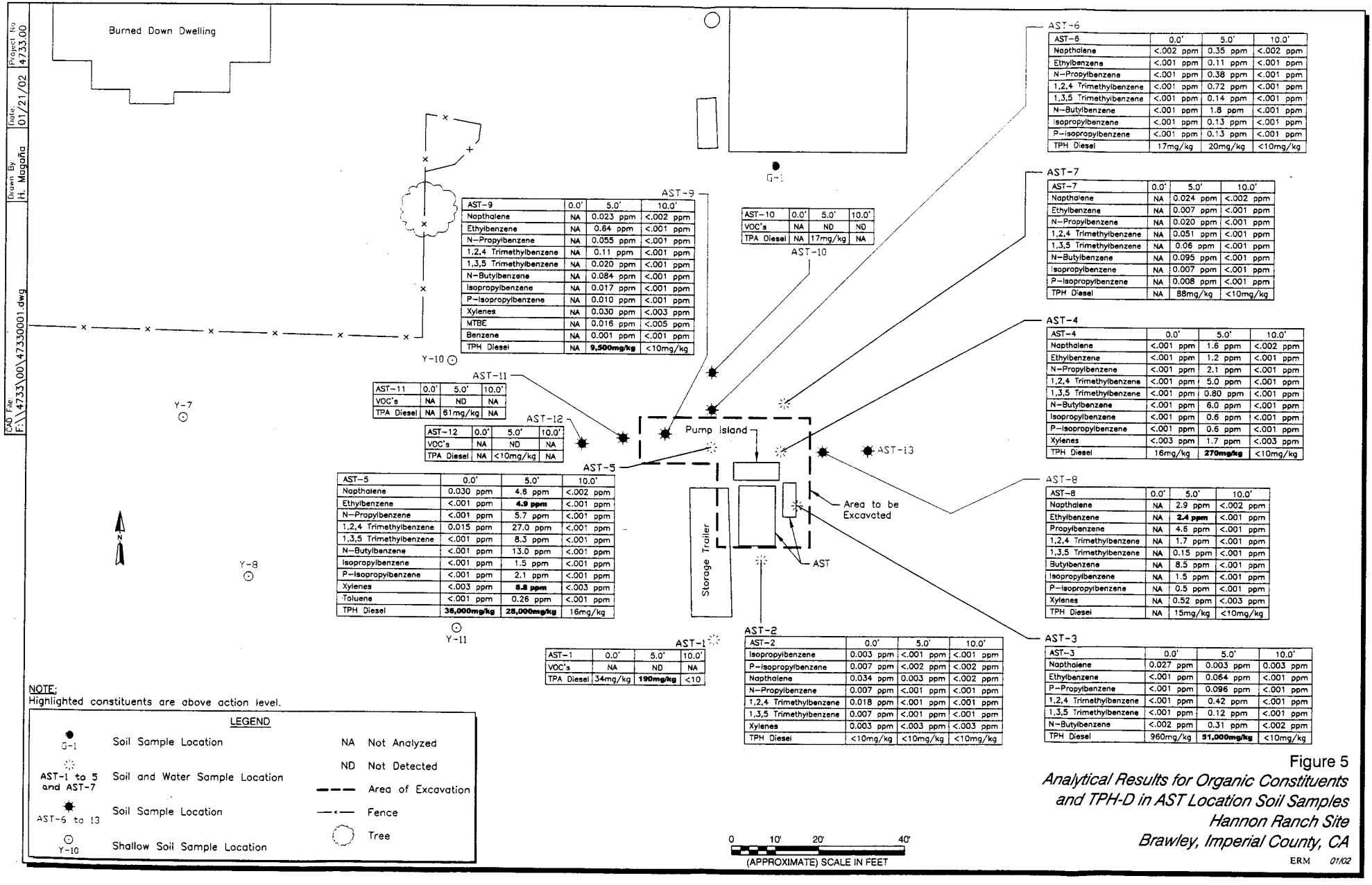
Project No: 4733.00



AST-9	0.0'	5.0'	10.0'
Napthalene	NA	0.023 ppm	<.002 ppm
Ethylbenzene	NA	0.64 ppm	<.001 ppm
N-Propylbenzene	NA	0.055 ppm	<.001 ppm
1,2,4 Trimethylbenzene	NA	0.11 ppm	<.001 ppm
1,3,5 Trimethylbenzene	NA	0.020 ppm	<.001 ppm
N-Butylbenzene	NA	0.084 ppm	<.001 ppm
Isopropylbenzene	NA	0.017 ppm	<.001 ppm
P-Isopropylbenzene	NA	0.010 ppm	<.001 ppm
Xylenes	NA	0.030 ppm	<.003 ppm
MTBE	NA	0.016 ppm	<.005 ppm
Benzene	NA	0.001 ppm	<.001 ppm
TPH Diesel	NA	**9,500mg/kg**	<10mg/kg

AST-10	0.0'	5.0'	10.0'
VOC's	NA	ND	ND
TPA Diesel	NA	17mg/kg	NA

AST-11	0.0'	5.0'	10.0'
VOC's	NA	ND	NA
TPA Diesel	NA	61mg/kg	NA

AST-12	0.0'	5.0'	10.0'
VOC's	NA	ND	NA
TPA Diesel	NA	<10mg/kg	NA

AST-5	0.0'	5.0'	10.0'
Napthalene	0.030 ppm	4.6 ppm	<.002 ppm
Ethylbenzene	<.001 ppm	**4.9 ppm**	<.001 ppm
N-Propylbenzene	<.001 ppm	5.7 ppm	<.001 ppm
1,2,4 Trimethylbenzene	0.015 ppm	27.0 ppm	<.001 ppm
1,3,5 Trimethylbenzene	<.001 ppm	8.3 ppm	<.001 ppm
N-Butylbenzene	<.001 ppm	13.0 ppm	<.001 ppm
Isopropylbenzene	<.001 ppm	1.5 ppm	<.001 ppm
P-Isopropylbenzene	<.001 ppm	2.1 ppm	<.001 ppm
Xylenes	<.003 ppm	**8.8 ppm**	<.003 ppm
Toluene	<.001 ppm	0.26 ppm	<.001 ppm
TPH Diesel	**36,000mg/kg**	**28,000mg/kg**	16mg/kg

AST-1	0.0'	5.0'	10.0'
VOC's	NA	ND	NA
TPA Diesel	34mg/kg	**190mg/kg**	<10

AST-2	0.0'	5.0'	10.0'
Isopropylbenzene	0.003 ppm	<.001 ppm	<.001 ppm
P-Isopropylbenzene	0.007 ppm	<.002 ppm	<.002 ppm
Napthalene	0.034 ppm	0.003 ppm	<.002 ppm
N-Propylbenzene	0.007 ppm	<.001 ppm	<.001 ppm
1,2,4 Trimethylbenzene	0.018 ppm	<.001 ppm	<.001 ppm
1,3,5 Trimethylbenzene	0.007 ppm	<.001 ppm	<.001 ppm
Xylenes	0.003 ppm	<.003 ppm	<.003 ppm
TPH Diesel	<10mg/kg	<10mg/kg	<10mg/kg

AST-6	0.0'	5.0'	10.0'
Napthalene	<.002 ppm	0.35 ppm	<.002 ppm
Ethylbenzene	<.001 ppm	0.11 ppm	<.001 ppm
N-Propylbenzene	<.001 ppm	0.38 ppm	<.001 ppm
1,2,4 Trimethylbenzene	<.001 ppm	0.72 ppm	<.001 ppm
1,3,5 Trimethylbenzene	<.001 ppm	0.14 ppm	<.001 ppm
N-Butylbenzene	<.001 ppm	1.8 ppm	<.001 ppm
Isopropylbenzene	<.001 ppm	0.13 ppm	<.001 ppm
P-Isopropylbenzene	<.001 ppm	0.13 ppm	<.001 ppm
TPH Diesel	17mg/kg	20mg/kg	<10mg/kg

AST-7	0.0'	5.0'	10.0'
Napthalene	NA	0.024 ppm	<.002 ppm
Ethylbenzene	NA	0.007 ppm	<.001 ppm
N-Propylbenzene	NA	0.020 ppm	<.001 ppm
1,2,4 Trimethylbenzene	NA	0.051 ppm	<.001 ppm
1,3,5 Trimethylbenzene	NA	0.06 ppm	<.001 ppm
N-Butylbenzene	NA	0.095 ppm	<.001 ppm
Isopropylbenzene	NA	0.007 ppm	<.001 ppm
P-Isopropylbenzene	NA	0.008 ppm	<.001 ppm
TPH Diesel	NA	88mg/kg	<10mg/kg

AST-4	0.0'	5.0'	10.0'
Napthalene	<.001 ppm	1.6 ppm	<.002 ppm
Ethylbenzene	<.001 ppm	1.2 ppm	<.001 ppm
N-Propylbenzene	<.001 ppm	2.1 ppm	<.001 ppm
1,2,4 Trimethylbenzene	<.001 ppm	5.0 ppm	<.001 ppm
1,3,5 Trimethylbenzene	<.001 ppm	0.80 ppm	<.001 ppm
N-Butylbenzene	<.001 ppm	6.0 ppm	<.001 ppm
Isopropylbenzene	<.001 ppm	0.6 ppm	<.001 ppm
P-Isopropylbenzene	<.001 ppm	0.6 ppm	<.001 ppm
Xylenes	<.003 ppm	1.7 ppm	<.003 ppm
TPH Diesel	16mg/kg	**270mg/kg**	<10mg/kg

AST-8	0.0'	5.0'	10.0'
Napthalene	NA	2.9 ppm	<.002 ppm
Ethylbenzene	NA	**2.4 ppm**	<.001 ppm
Propylbenzene	NA	4.6 ppm	<.001 ppm
1,2,4 Trimethylbenzene	NA	1.7 ppm	<.001 ppm
1,3,5 Trimethylbenzene	NA	0.15 ppm	<.001 ppm
Butylbenzene	NA	8.5 ppm	<.001 ppm
Isopropylbenzene	NA	1.5 ppm	<.001 ppm
P-Isopropylbenzene	NA	0.5 ppm	<.001 ppm
Xylenes	NA	0.52 ppm	<.003 ppm
TPH Diesel	NA	15mg/kg	<10mg/kg

AST-3	0.0'	5.0'	10.0'
Napthalene	0.027 ppm	0.003 ppm	0.003 ppm
Ethylbenzene	<.001 ppm	0.064 ppm	<.001 ppm
P-Propylbenzene	<.001 ppm	0.096 ppm	<.001 ppm
1,2,4 Trimethylbenzene	<.001 ppm	0.42 ppm	<.001 ppm
1,3,5 Trimethylbenzene	<.001 ppm	0.12 ppm	<.001 ppm
N-Butylbenzene	<.002 ppm	0.31 ppm	<.002 ppm
TPH Diesel	960mg/kg	**51,000mg/kg**	<10mg/kg

NOTE:
Highlighted constituents are above action level.

LEGEND

G-1	Soil Sample Location	NA	Not Analyzed
AST-1 to 5 and AST-7	Soil and Water Sample Location	ND	Not Detected
AST-6 to 13	Soil Sample Location		Area of Excavation
Y-10	Shallow Soil Sample Location		Fence
			Tree

Figure 5
Analytical Results for Organic Constituents and TPH-D in AST Location Soil Samples
Hannon Ranch Site
Brawley, Imperial County, CA

ERM 01/02