TABLE 3.5-2. PIPELINE CORRIDOR SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	69	6	8.70%	211 J	PC-I08-DP01 (10 ft)	0	~~2~~	500	~~200~~
C9-C10, Aromatic, Adjusted	n	69	7	10.14%	418 J	PC-I08-DP01 (10 ft)	0	~~4~~	1,000	~~100~~
C9-C12, Aliphatic, Adjusted	n	69	7	10.14%	415	PC-I08-DP01 (10 ft)	0	~~0~~	1,000	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	7	7	100.00%	1840	PC-I08-DP01 (10 ft)	0	~~0~~	2,000	~~50,000~~
C11-C22, Aromatic, Adjusted	n	7	7	100.00%	1150	PC-I08-DP01 (10 ft)	0	~~4~~	4,000	~~400~~
C19-C36, Aliphatic, Adjusted	n	7	7	100.00%	1960	PC-I08-DP01 (10 ft)	0	~~0~~	100,000	NA
Total Extractable Hydrocarbons	n	69	7	10.14%	5060 J	PC-I08-DP01 (10 ft)	0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.6-1. VCP EXCAVATION AREA SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	6	0	0.00%	--		**0**	~~0~~	6	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	6	6	100.00%	15.7	VCP14-A07-DP01 (0-0.5 ft)	6	6	**0**	0.61	2.9	**25.1**
Barium, Total	n	6	6	100.00%	337 J	VCP14-B08-DP01 (1-3 ft)	**0**	~~0~~	0	**1,500**	~~414~~	392
Beryllium, Total	n	6	6	100.00%	1.12 J	VCP14-B07-DP01 (1.5-3.5 ft)	**0**	~~0~~	2	**16**	~~32~~	0.817
Cadmium, Total	n	6	6	100.00%	2.5 JB	VCP14-B07-DP01 (1.5-3.5 ft)	**0**	~~0~~	2	**7**	~~3.8~~	1.17
Chromium, Total	n	6	6	100.00%	34.7 J	VCP14-B07-DP01 (1.5-3.5 ft)	**0**	~~0~~	1	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	6	6	100.00%	7.64	VCP14-B09-DP01 (0-0.5 ft)	6	~~6~~	**0**	2.3	~~2.1~~	**9.13**
Copper, Total	n	6	6	100.00%	38.7 J	VCP14-B08-DP01 (1-3 ft)	**0**	~~0~~	2	**310**	~~460~~	26.6
Cyanide, Total	n	6	0	0.00%	--		**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	6	6	100.00%	149000 J	VCP14-B07-DP01 (1.5-3.5 ft)	**4**	~~4~~	4	**400**	~~140~~	30.2
Mercury, Total	n	6	6	100.00%	0.0765 JB	VCP14-B08-DP01 (1-3 ft)	**0**	~~0~~	0	**2.3**	~~NA~~	0.0837
Nickel, Total	n	6	6	100.00%	31.2	VCP14-B08-DP01 (1-3 ft)	**0**	~~0~~	0	**150**	~~147~~	32.6
Selenium, Total	n	6	2	33.33%	0.952 J	VCP14-B07-DP01 (1.5-3.5 ft)	**0**	~~0~~	0	**39**	~~2.6~~	2.09
Silver, Total	n	6	0	0.00%	--		**0**	~~0~~	0	**39**	~~6~~	0.168
Vanadium, Total	n	6	6	100.00%	84.2 J	VCP14-B07-DP01 (1.5-3.5 ft)	6	~~0~~	**2**	39	~~780~~	**63.9**
Zinc, Total	n	6	6	100.00%	121	VCP14-B08-DP01 (1-3 ft)	**0**	~~0~~	1	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Benzene	c	6	0	0.00%	--		0	0	1	0.04
2-Butanone	n	6	0	0.00%	--		0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	6	0	0.00%	--		0	0	390	2.5
sec-Butylbenzene	n	6	1	16.67%	0.56	VCP14-B07-DP01 (1.5-3.5 ft)	0	0	780	4.6
tert-Butylbenzene	n	6	0	0.00%	--		0	0	780	1.1
Carbon Disulfide	n	6	0	0.00%	--		0	~~0~~	82	~~2.1~~
Chlorobenzene	n	6	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	6	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	6	0	0.00%	--		0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	6	0	0.00%	--		0	0	0.04	0.00002
1,1-Dichloroethane	c	6	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	6	0	0.00%	--		0	0	0.5	0.01
Ethylbenzene	c	6	1	16.67%	0.099 J	VCP14-B07-DP01 (1.5-3.5 ft)	0	0	6	10
Hexane	n	6	0	0.00%	--		0	~~0~~	57	~~18~~
Isopropylbenzene	n	6	1	16.67%	0.22 J	VCP14-B07-DP01 (1.5-3.5 ft)	0	~~0~~	210	~~6.4~~
MTBE	c	6	0	0.00%	--		0	0	40	0.08
n-Propylbenzene	n	6	1	16.67%	0.38	VCP14-B07-DP01 (1.5-3.5 ft)	0	~~0~~	340	~~9.9~~
Styrene	n	6	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	6	0	0.00%	--		0	0	8.6	0.023
Toluene	n	6	0	0.00%	--		0	~~0~~	600	~~10~~
1,1,1-Trichloroethane	n	6	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	6	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	6	0	0.00%	--		0	~~0~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	6	0	0.00%	--		0	~~0~~	78	~~1.2~~
m,p-Xylene	n	6	0	0.00%	--		0	~~0~~	59	~~94.74~~
o-Xylene	n	6	0	0.00%	--		0	~~0~~	69	~~100~~
Xylenes, Total	n	6	0	0.00%	--		0	~~0~~	70	~~200~~

TABLE 3.6-1. VCP EXCAVATION AREA SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
1,2-Dichlorobenzene	n	6	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	6	0	0.00%	--		0	0	NA	NA
1,4-Dichlorobenzene	c	6	0	0.00%	--		0	0	2.4	0.72
1,4-Dioxane	c	6	0	0.00%	--		0	0	4.9	0.0014
1-Methylnaphthalene	c	6	0	0.00%	--		0	0	16	0.051
2,4-Dimethylphenol	n	6	0	0.00%	--		0	~~0~~	120	~~4.5~~
2,4-Dinitrophenol	n	6	0	0.00%	--		0	~~0~~	12	~~0.782~~
2-Methylnaphthalene	n	6	0	0.00%	--		0	~~0~~	23	~~1.4~~
2-Methylphenol	n	6	0	0.00%	--		0	~~0~~	310	~~5.8~~
4-Methylphenol	n	6	0	0.00%	--		0	~~0~~	610	~~11~~
4-Nitrophenol	--	6	0	0.00%	--		0	0	NA	NA
Acenaphthene	n	6	0	0.00%	--		0	~~0~~	400	~~200~~
Anthracene	n	6	0	0.00%	--		0	~~0~~	2,000	~~4,000~~
Benzo(a)anthracene	c	6	0	0.00%	--		0	0	0.2	10
Benzo(a)pyrene	c	6	1	16.67%	0.0043 J	VCP14-A09-DP01 (1-3 ft)	0	0	0.02	4
Benzo(b)fluoranthene	c	6	2	33.33%	0.0067 J	VCP14-A09-DP01 (1-3 ft)	0	0	0.2	50
Benzo(k)fluoranthene	c	6	0	0.00%	--		0	0	2	500
Bis(2-ethylhexyl)phthalate	c	6	0	0.00%	--		0	0	35	14
Chrysene	c	6	2	33.33%	0.034 J	VCP14-B07-DP01 (1.5-3.5 ft)	0	0	20	2,000
Dibenz(a,h)acridine	--	6	0	0.00%	--		0	0	NA	NA
Dibenzo(a,h)anthracene	c	6	0	0.00%	--		0	0	0.02	7
Diethylphthalate	n	6	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
Dimethylphthalate	--	6	0	0.00%	--		0	0	NA	NA
Di-n-butylphthalate	n	6	0	0.00%	--		0	~~0~~	610	~~50.75~~
Fluoranthene	n	6	2	33.33%	0.012 J	VCP14-A09-DP01 (1-3 ft)	0	~~0~~	300	~~500~~
Fluorene	n	6	0	0.00%	--		0	~~0~~	300	~~600~~
Indene	--	6	0	0.00%	--		0	0	NA	NA
Indeno(1,2,3-cd)pyrene	c	6	2	33.33%	0.0079 J	VCP14-A09-DP01 (1-3 ft)	0	0	0.2	100
Naphthalene	n	6	1	16.67%	0.0091 J	VCP14-A09-DP01 (1-3 ft)	0	~~0~~	4	~~9~~
Phenanthrene	--	6	3	50.00%	0.044 J	VCP14-B07-DP01 (1.5-3.5 ft)	0	0	NA	NA
Phenol	n	6	0	0.00%	--		0	~~0~~	1,800	~~1.73~~
Pyrene	c	6	2	33.33%	0.012 J	VCP14-A09-DP01 (1-3 ft)	0	0	200	4,000
Pyridine	n	6	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	6	0	0.00%	--		0	0	0.16	0.00068
Tetraethyl Lead	n	6	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
Thiophenol	n	6	0	0.00%	--		0	~~0~~	7.8	~~0.086~~

TABLE 3.6-1. VCP EXCAVATION AREA SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency[4]	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	6	1	16.67%	101	VCP14-B07-DP01 (1.5-3.5 ft)	1	~~0~~	60	~~200~~
C9-C10, Aromatic, Adjusted	n	6	1	16.67%	283	VCP14-B07-DP01 (1.5-3.5 ft)	1	~~1~~	100	~~100~~
C9-C12, Aliphatic, Adjusted	n	6	2	33.33%	409	VCP14-B07-DP01 (1.5-3.5 ft)	1	~~0~~	100	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	2	2	33.33%	580	VCP14-B07-DP01 (1.5-3.5 ft)	1	~~0~~	200	~~50,000~~
C11-C22, Aromatic, Adjusted	n	2	2	33.33%	260 J	VCP14-B08-DP01 (1-3 ft)	0	~~0~~	500	~~400~~
C19-C36, Aliphatic, Adjusted	n	2	2	33.33%	480	VCP14-B08-DP01 (1-3 ft)	0	~~0~~	20,000	NA
Total Extractable Hydrocarbons	n	6	2	33.33%	1700	VCP14-B08-DP01 (1-3 ft)	0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.6-2. VCP EXCAVATION AREA SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	98	0	0.00%	--		**0**	~~0~~	98	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	98	98	100.00%	24.3 J	VCP04-A01-DP01 (4-6 ft)	98	98	**0**	0.61	2.9	**25.1**
Barium, Total	n	98	98	100.00%	475 J	VCP22-B01-DP01 (17-19 ft)	**0**	~~2~~	2	**1,500**	~~414~~	392
Beryllium, Total	n	98	98	100.00%	1.43 JB	VCP01-A05-DP01 (6-8 ft)	**0**	~~0~~	29	**16**	~~32~~	0.817
Cadmium, Total	n	98	98	100.00%	1.46	VCP23-A03-DP01 (10-12 ft)	**0**	~~0~~	11	**7**	~~3.8~~	1.17
Chromium, Total	n	98	98	100.00%	52.9 J	VCP01-A04-DP01 (2-4 ft)	**0**	~~0~~	22	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	98	98	100.00%	13	VCP23-E02-DP01 (13-15 ft)	98	~~98~~	**10**	2.3	~~2.1~~	**9.13**
Copper, Total	n	98	98	100.00%	37.5	VCP23-C03-DP01 (13-15 ft)	**0**	~~0~~	7	**310**	~~460~~	26.6
Cyanide, Total	n	98	0	0.00%	--		**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	98	98	100.00%	1260	VCP03-A01-DP01 (2-4 ft)	**3**	~~4~~	18	**400**	~~140~~	30.2
Mercury, Total	n	98	95	96.94%	1.28 J	VCP01-A04-DP01 (2-4 ft)	**0**	~~0~~	10	**2.3**	~~NA~~	0.0837
Nickel, Total	n	98	98	100.00%	47.1 J	VCP13-A01-DP01 (6-8 ft)	**0**	~~0~~	14	**150**	~~147~~	32.6
Selenium, Total	n	98	21	21.43%	3.32	VCP08-B02-DP01 (5-7 ft)	**0**	~~4~~	6	**39**	~~2.6~~	2.09
Silver, Total	n	98	1	1.02%	0.603	VCP22-B02-DP01 (13-15 ft)	**0**	~~0~~	74	**39**	~~6~~	0.168
Vanadium, Total	n	98	98	100.00%	143 J	VCP01-A04-DP01 (2-4 ft)	74	~~0~~	**25**	39	~~780~~	**63.9**
Zinc, Total	n	98	98	100.00%	129	VCP01-A04-DP01 (2-4 ft)	**0**	~~0~~	2	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen	Sample Count	Detect Count	Detection Frequency	Max Detect	Location of Maximum Detect	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
Benzene	c	98	24	24.49%	2 J	VCP05-A03-DP01 (12.5-14.5 ft)	0	11	200	0.04
2-Butanone	n	98	6	6.12%	0.014	VCP22-D02-DP01 (19-21 ft)	0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	98	22	22.45%	5.1 J	VCP22-C01-DP01 (7-9 ft)	0	1	390	2.5
sec-Butylbenzene	n	98	25	25.51%	6.8	VCP05-A03-DP01 (12.5-14.5 ft)	0	1	780	4.6
tert-Butylbenzene	n	98	5	5.10%	0.14 J	VCP22-C01-DP01 (7-9 ft)	0	0	780	1.1
Carbon Disulfide	n	98	2	2.04%	0.104 J	VCP01-B04-DP01 (8-10 ft)	0	~~0~~	82	~~2.1~~
Chlorobenzene	n	98	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	98	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	98	17	17.35%	62 J	VCP05-A03-DP01 (12.5-14.5 ft)	0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	98	0	0.00%	--		0	0	7	0.00002
1,1-Dichloroethane	c	98	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	98	4	4.08%	0.00715	VCP01-C04-DP01 (6-8 ft)	0	0	104	0.01
Ethylbenzene	c	98	27	27.55%	21	VCP05-A03-DP01 (12.5-14.5 ft)	0	2	1,000	10
Hexane	n	98	16	16.33%	29 J	VCP22-C01-DP01 (7-9 ft)	0	~~1~~	57	~~18~~
Isopropylbenzene	n	98	27	27.55%	8.5	VCP05-A03-DP01 (12.5-14.5 ft)	0	~~1~~	210	~~6.4~~
MTBE	c	98	0	0.00%	--		0	0	8,000	0.08
n-Propylbenzene	n	98	27	27.55%	14	VCP05-A03-DP01 (12.5-14.5 ft)	0	~~1~~	340	~~9.9~~
Styrene	n	98	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	98	0	0.00%	--		0	0	8.6	0.023
Toluene	n	98	14	14.29%	2.7	VCP22-C01-DP01 (7-9 ft)	0	~~0~~	5,000	~~10~~
1,1,1-Trichloroethane	n	98	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	98	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	98	25	25.51%	82	VCP05-A03-DP01 (12.5-14.5 ft)	7	~~18~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	98	24	24.49%	36	VCP05-A03-DP01 (12.5-14.5 ft)	0	~~12~~	78	~~1.2~~
m,p-Xylene	n	98	22	22.45%	29	VCP05-A03-DP01 (12.5-14.5 ft)	0	~~0~~	59	~~94.74~~
o-Xylene	n	98	9	9.18%	6.8	VCP01-B04-DP01 (8-10 ft)	0	~~0~~	69	~~100~~
Xylenes, Total	n	98	22	22.45%	29	VCP05-A03-DP01 (12.5-14.5 ft)	0	~~0~~	600	~~200~~

TABLE 3.6-2. VCP EXCAVATION AREA SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen	Sample Count	Detect Count	Detection Frequency	Max Detect	Location of Maximum Detect	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
Acenaphthene	n	98	4	4.08%	0.58 J	VCP13-A01-DP01 (6-8 ft)	0	~~0~~	4,000	~~200~~
Anthracene	n	98	8	8.16%	2.6 J	VCP13-A01-DP01 (6-8 ft)	0	~~0~~	20,000	~~4,000~~
Benzo(a)anthracene	c	98	5	5.10%	1.4 J	VCP13-A01-DP01 (6-8 ft)	0	0	50	10
Benzo(a)pyrene	c	98	18	18.37%	0.67 J	VCP13-A01-DP01 (6-8 ft)	0	0	5	4
Benzo(b)fluoranthene	c	98	5	5.10%	0.31 J	VCP13-A01-DP01 (6-8 ft)	0	0	50	50
Benzo(k)fluoranthene	c	98	2	2.04%	0.087 J	VCP13-A01-DP01 (6-8 ft)	0	0	500	500
Bis(2-ethylhexyl)phthalate	c	98	0	0.00%	--		0	0	35	14
Chrysene	c	98	16	16.33%	2 J	VCP13-A01-DP01 (6-8 ft)	0	0	5,000	2,000
Dibenz(a,h)acridine	--	98	0	0.00%	--		0	0	NA	NA
Dibenzo(a,h)anthracene	c	98	5	5.10%	0.1 J	VCP13-A01-DP01 (6-8 ft)	0	0	5	7
1,2-Dichlorobenzene	n	98	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	98	0	0.00%	--		0	0	NA	NA
1,4-Dichlorobenzene	c	98	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	n	98	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
2,4-Dimethylphenol	n	98	3	3.06%	1.1	VCP22-C01-DP01 (7-9 ft)	0	~~0~~	120	~~4.5~~
Dimethylphthalate	--	98	0	0.00%	--		0	0	NA	NA
Di-n-butylphthalate	n	98	0	0.00%	--		0	~~0~~	610	~~50.75~~
2,4-Dinitrophenol	n	98	0	0.00%	--		0	~~0~~	12	~~0.782~~
1,4-Dioxane	c	98	0	0.00%	--		0	0	4.9	0.0014
Fluoranthene	n	98	5	5.10%	0.57 J	VCP13-A01-DP01 (6-8 ft)	0	~~0~~	2,000	~~500~~
Fluorene	n	98	18	18.37%	2.2 J	VCP13-A01-DP01 (6-8 ft)	0	~~0~~	2,000	~~600~~
Indene	--	98	1	1.02%	0.045 J	VCP22-D02-DP01 (19-21 ft)	0	0	NA	NA
Indeno(1,2,3-cd)pyrene	c	98	3	3.06%	0.14 J	VCP13-A01-DP01 (6-8 ft)	0	0	50	100
Tetraethyl Lead	n	98	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
1-Methylnaphthalene	c	98	27	27.55%	20.7	VCP01-B04-DP01 (8-10 ft)	1	24	16	0.051
2-Methylnaphthalene	n	98	19	19.39%	36.5 J	VCP01-B04-DP01 (8-10 ft)	1	~~7~~	23	~~1.4~~
2-Methylphenol	n	98	2	2.04%	2	VCP22-D01-DP01 (7-9 ft)	0	~~0~~	310	~~5.8~~
4-Methylphenol	n	98	0	0.00%	--		0	~~0~~	610	~~11~~
Naphthalene	n	98	17	17.35%	13.4	VCP01-B04-DP01 (8-10 ft)	0	~~1~~	200	~~9~~
4-Nitrophenol	--	98	1	1.02%	0.668 J	VCP01-B04-DP01 (8-10 ft)	0	0	NA	NA
Phenanthrene	--	98	20	20.41%	9.3 J	VCP13-A01-DP01 (6-8 ft)	0	0	NA	NA
Phenol	n	98	1	1.02%	0.088 J	VCP22-D01-DP01 (7-9 ft)	0	~~0~~	1,800	~~1.73~~
Pyrene	c	98	10	10.20%	4.4 J	VCP13-A01-DP01 (6-8 ft)	0	0	2,000	4,000
Pyridine	n	98	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	98	0	0.00%	--		0	0	0.16	0.00068
Thiophenol	n	98	0	0.00%	--		0	~~0~~	7.8	~~0.086~~

TABLE 3.6-2. VCP EXCAVATION AREA SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen	Sample Count	Detect Count	Detection Frequency	Max Detect	Location of Maximum Detect	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	98	26	26.53%	1470 J	VCP05-A03-DP01 (12.5-14.5 ft)	4	~~9~~	500	~~200~~
C9-C10, Aromatic, Adjusted	n	98	29	29.59%	1340 J	VCP05-A03-DP01 (12.5-14.5 ft)	3	~~19~~	1,000	~~100~~
C9-C12, Aliphatic, Adjusted	n	98	30	30.61%	1870 J	VCP22-C01-DP01 (7-9 ft)	2	~~0~~	1,000	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	67	~~38~~	38.78%	3800 J	VCP23-B03-DP01 (15-17 ft)	3	~~0~~	2,000	~~50,000~~
C11-C22, Aromatic, Adjusted	n	67	38	38.78%	1500	VCP06-A02-DP01 (6-8 ft)	0	~~11~~	4,000	~~400~~
C19-C36, Aliphatic, Adjusted	n	67	33	33.67%	3000 J	VCP06-A02-DP01 (6-8 ft)	0	~~0~~	100,000	NA
Total Extractable Hydrocarbons	n	98	34	34.69%	7400 J	VCP06-A02-DP01 (6-8 ft)	0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.7-1. RAILROAD LOADING RACK SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	36	11	30.56%	8.89	RR-Q09-DP04 (0-0.5 ft)	**2**	~~2~~	36	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	36	36	100.00%	39.1 J	RR-Q10-DP01 (0-0.5 ft)	36	36	**3**	0.61	2.9	**25.1**
Barium, Total	n	36	36	100.00%	492 J	RR-Q07-DP04 (0-0.5 ft)	**0**	~~1~~	1	**1,500**	~~414~~	392
Beryllium, Total	n	36	36	100.00%	1.29	RR-Q08-DP01 (0-0.5 ft)	**0**	~~0~~	8	**16**	~~32~~	0.817
Cadmium, Total	n	36	36	100.00%	3.22	RR-Q08-DP04 (0-0.5 ft)	**0**	~~0~~	10	**7**	~~3.8~~	1.17
Chromium, Total	n	36	36	100.00%	36.6 J	RR-Q15-DP01 (0-0.5 ft)	**0**	~~0~~	1	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	36	36	100.00%	28.9	RR-Q08-DP01 (0-0.5 ft)	36	~~36~~	**6**	2.3	~~2.1~~	**9.13**
Copper, Total	n	36	36	100.00%	144	RR-Q08-DP01 (0-0.5 ft)	**0**	~~0~~	22	**310**	~~460~~	26.6
Cyanide, Total	n	36	1	2.78%	0.3 J	RR-Q10-DP02 (0-0.5 ft)	**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	36	36	100.00%	1140	RR-Q09-DP06 (0-0.5 ft)	**7**	~~13~~	32	**400**	~~140~~	30.2
Mercury, Total	n	36	36	100.00%	12.8	RR-Q08-DP02 (0-0.5 ft)	**2**	~~0~~	23	**2.3**	~~NA~~	0.0837
Nickel, Total	n	36	36	100.00%	58.1	RR-Q08-DP01 (0-0.5 ft)	**0**	~~0~~	2	**150**	~~147~~	32.6
Selenium, Total	n	36	21	58.33%	2.34	RR-Q10-DP02 (0-0.5 ft)	**0**	~~0~~	3	**39**	~~2.6~~	2.09
Silver, Total	n	36	15	41.67%	2.21	RR-Q08-DP02 (0-0.5 ft)	**0**	~~0~~	10	**39**	~~6~~	0.168
Vanadium, Total	n	36	36	100.00%	98.6 J	RR-Q15-DP01 (0-0.5 ft)	11	~~0~~	**2**	39	~~780~~	**63.9**
Zinc, Total	n	36	36	100.00%	832	RR-Q10-DP02 (0-0.5 ft)	**0**	~~0~~	17	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Benzene	c	30	2	6.67%	0.74	RR-Q08-DP04 (1.5-2 ft)	0	2	1	0.04
2-Butanone	n	30	0	0.00%	--		0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	30	0	0.00%	--		0	~~0~~	390	~~2.5~~
sec-Butylbenzene	n	30	1	3.33%	0.1 J	RR-Q07-DP02 (1.5-2 ft)	0	~~0~~	780	~~4.6~~
tert-Butylbenzene	n	30	0	0.00%	--		0	~~0~~	780	~~1.1~~
Carbon Disulfide	n	30	0	0.00%	--		0	~~0~~	82	~~2.1~~
Chlorobenzene	n	30	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	30	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	30	1	3.33%	0.11 J	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	30	0	0.00%	--		0	0	0.04	0.00002
1,1-Dichloroethane	c	30	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	30	0	0.00%	--		0	0	0.5	0.01
Ethylbenzene	c	30	1	3.33%	0.22 J	RR-Q08-DP04 (1.5-2 ft)	0	0	6	10
Hexane	n	30	3	10.00%	0.43	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	57	~~18~~
Isopropylbenzene	n	30	3	10.00%	0.003 J	RR-Q09-DP01 (1.5-2 ft), RR-Q08-DP03 (1.5-2 ft)	0	~~0~~	210	~~6.4~~
MTBE	c	30	0	0.00%	--		0	0	40	0.08
n-Propylbenzene	n	30	1	3.33%	0.069 J	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	340	~~9.9~~
Styrene	n	30	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	30	0	0.00%	--		0	0	8.6	0.023
Toluene	n	30	3	10.00%	0.59	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	600	~~10~~
1,1,1-Trichloroethane	n	30	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	30	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	30	2	6.67%	0.52	RR-Q08-DP04 (1.5-2 ft)	0	~~1~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	30	1	3.33%	0.18 J	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	78	~~1.2~~
m,p-Xylene	n	30	2	6.67%	1.3	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	59	~~94.74~~
o-Xylene	n	30	1	3.33%	0.42	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	69	~~100~~
Xylenes, Total	n	30	2	6.67%	1.7	RR-Q08-DP04 (1.5-2 ft)	0	~~0~~	70	~~200~~

TABLE 3.7-1. RAILROAD LOADING RACK SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Acenaphthene	n	36	2	5.56%	0.07 J	RR-Q10-DP02 (0-0.5 ft)	0	~~0~~	400	~~200~~
Anthracene	n	36	21	58.33%	0.82 J	RR-Q05-DP06 (0-0.5 ft)	0	~~0~~	2,000	~~4,000~~
Benzo(a)anthracene	c	36	11	30.56%	2.2	RR-Q10-DP02 (0-0.5 ft)	2	0	0.2	10
Benzo(a)pyrene	c	36	21	58.33%	3.3	RR-Q05-DP06 (0-0.5 ft)	21	0	0.02	4
Benzo(b)fluoranthene	c	36	26	72.22%	3.3	RR-Q10-DP02 (0-0.5 ft)	11	0	0.2	50
Benzo(k)fluoranthene	c	36	8	22.22%	1.3	RR-Q10-DP02 (0-0.5 ft)	0	0	2	500
Bis(2-ethylhexyl)phthalate	c	36	4	11.11%	0.51 J	RR-Q09-DP05 (0-0.5 ft)	0	0	35	14
Chrysene	c	36	25	69.44%	6.1	RR-Q05-DP06 (0-0.5 ft)	0	0	20	2,000
Dibenz(a,h)acridine	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Dibenzo(a,h)anthracene	c	36	10	27.78%	1.4 J	RR-Q05-DP06 (0-0.5 ft)	8	0	0.02	7
1,2-Dichlorobenzene	n	36	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
1,4-Dichlorobenzene	c	36	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	n	36	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
2,4-Dimethylphenol	n	36	0	0.00%	--		0	~~0~~	120	~~4.5~~
Dimethylphthalate	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Di-n-butylphthalate	n	36	0	0.00%	--		0	~~0~~	610	~~50.75~~
2,4-Dinitrophenol	n	36	0	0.00%	--		0	~~0~~	12	~~0.782~~
1,4-Dioxane	c	36	0	0.00%	--		0	0	4.9	0.0014
Fluoranthene	n	36	22	61.11%	3.3	RR-Q10-DP02 (0-0.5 ft)	0	~~0~~	300	~~500~~
Fluorene	n	36	5	13.89%	0.11	RR-Q10-DP02 (0-0.5 ft)	0	~~0~~	300	~~600~~
Indene	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Indeno(1,2,3-cd)pyrene	c	36	25	69.44%	1.8	RR-Q05-DP06 (0-0.5 ft)	10	0	0.2	100
Tetraethyl Lead	n	36	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
1-Methylnaphthalene	c	36	19	52.78%	0.43 J	RR-Q08-DP01 (0-0.5 ft)	0	10	16	0.051
2-Methylnaphthalene	n	36	9	25.00%	0.99 J	RR-Q08-DP01 (0-0.5 ft)	0	~~0~~	23	~~1.4~~
2-Methylphenol	n	36	0	0.00%	--		0	~~0~~	310	~~5.8~~
4-Methylphenol	n	36	0	0.00%	--		0	~~0~~	610	~~11~~
Naphthalene	n	36	17	47.22%	0.68 J	RR-Q08-DP01 (0-0.5 ft)	0	~~0~~	4	~~9~~
4-Nitrophenol	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Phenanthrene	--	36	24	66.67%	1.8	RR-Q10-DP02 (0-0.5 ft)	0	~~0~~	NA	~~NA~~
Phenol	n	36	1	2.78%	0.021 J	RR-Q06-DP03 (0-0.5 ft)	0	~~0~~	1,800	~~1.73~~
Pyrene	c	36	32	88.89%	12	RR-Q05-DP06 (0-0.5 ft)	0	0	200	4,000
Pyridine	n	36	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	36	0	0.00%	--		0	0	0.16	0.00068
Thiophenol	n	36	0	0.00%	--		0	~~0~~	7.8	~~0.086~~

TABLE 3.7-1. RAILROAD LOADING RACK SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency[4]	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	30	1	3.33%	51.4 J	RR-Q07-DP02 (1.5-2 ft)	0	~~0~~	60	~~200~~
C9-C10, Aromatic, Adjusted	n	30	3	10.00%	99.9	RR-Q07-DP02 (1.5-2 ft)	0	~~0~~	100	~~100~~
C9-C12, Aliphatic, Adjusted	n	30	3	10.00%	55.8	RR-Q07-DP02 (1.5-2 ft)	0	~~0~~	100	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	30	20	66.67%	1500 J	RR-Q13-DP02 (0-0.5 ft)	6	~~0~~	200	~~50,000~~
C11-C22, Aromatic, Adjusted	n	30	28	93.33%	6300 J	RR-Q05-DP06 (0-0.5 ft)	9	~~9~~	500	~~400~~
C19-C36, Aliphatic, Adjusted	n	30	28	93.33%	8200 J	RR-Q05-DP06 (0-0.5 ft)	0	~~0~~	20,000	NA
Total Extractable Hydrocarbons	n	30	28	93.33%	16000 J	RR-Q05-DP06 (0-0.5 ft)	0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.7-2. RAILROAD LOADING RACK SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	36	2	5.56%	0.915 J	RR-Q16-DP01 (2-3.33 ft)	**0**	~~0~~	36	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	36	36	100.00%	28.5 J	RR-Q09-DP06 (2-3.33 ft)	36	36	**1**	0.61	2.9	**25.1**
Barium, Total	n	36	36	100.00%	822 J	RR-Q10-DP02 (2-3.33 ft)	**0**	~~5~~	6	**1,500**	~~414~~	392
Beryllium, Total	n	36	36	100.00%	1.17	RR-Q14-DP01 (2-3.33 ft)	**0**	~~0~~	9	**16**	~~32~~	0.817
Cadmium, Total	n	36	36	100.00%	1.17	RR-Q15-DP02 (2-3.33 ft)	**0**	~~0~~	0	**7**	~~3.8~~	1.17
Chromium, Total	n	36	36	100.00%	36.1 J	RR-Q14-DP01 (2-3.33 ft)	**0**	~~0~~	2	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	36	36	100.00%	8.9	RR-Q09-DP04 (4.67-6 ft)	36	~~36~~	**0**	2.3	~~2.1~~	**9.13**
Copper, Total	n	36	36	100.00%	30.4	RR-Q15-DP02 (2-3.33 ft)	**0**	~~0~~	3	**310**	~~460~~	26.6
Cyanide, Total	n	36	0	0.00%	--		**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	36	36	100.00%	256	RR-Q09-DP06 (2-3.33 ft)	**0**	~~2~~	3	**400**	~~140~~	30.2
Mercury, Total	n	36	36	100.00%	0.117	RR-Q10-DP01 (4.67-6 ft)	**0**	~~0~~	2	**2.3**	~~NA~~	0.0837
Nickel, Total	n	36	36	100.00%	32.8	RR-Q14-DP01 (2-3.33 ft)	**0**	~~0~~	1	**150**	~~147~~	32.6
Selenium, Total	n	36	16	44.44%	3.58	RR-Q13-DP03 (4.67-6 ft)	**0**	~~2~~	3	**39**	~~2.6~~	2.09
Silver, Total	n	36	14	38.89%	0.272 JB	RR-Q04-DP01 (2-3.33 ft), RR-Q16-DP01 (2-3.33 ft)	**0**	~~0~~	9	**39**	~~6~~	0.168
Vanadium, Total	n	36	36	100.00%	98.6 J	RR-Q13-DP02 (2-3.33 ft)	24	~~0~~	**6**	39	~~780~~	**63.9**
Zinc, Total	n	36	36	100.00%	115 J	RR-Q15-DP02 (2-3.33 ft)	**0**	~~0~~	0	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
Benzene	c	42	3	7.14%	2.7	RR-Q09-DP04 (4.67-6 ft)	0	2	200	0.04
2-Butanone	n	42	0	0.00%	--		0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	42	3	7.14%	4.6 J	RR-Q09-DP02 (4.67-6 ft)	0	~~1~~	390	~~2.5~~
sec-Butylbenzene	n	42	6	14.29%	2.9 J	RR-Q09-DP02 (4.67-6 ft)	0	~~0~~	780	~~4.6~~
tert-Butylbenzene	n	42	1	2.38%	0.004 J	RR-Q08-DP01 (5-6.33 ft)	0	~~0~~	780	~~1.1~~
Carbon Disulfide	n	42	0	0.00%	--		0	~~0~~	82	~~2.1~~
Chlorobenzene	n	42	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	42	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	42	4	9.52%	9.3 J	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	42	0	0.00%	--		0	0	7	0.00002
1,1-Dichloroethane	c	42	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	42	0	0.00%	--		0	0	104	0.01
Ethylbenzene	c	42	4	9.52%	9.1	RR-Q09-DP04 (4.67-6 ft)	0	0	1,000	10
Hexane	n	42	4	9.52%	2.4 J	RR-Q15-DP01 (4.67-6 ft)	0	~~0~~	57	~~18~~
Isopropylbenzene	n	42	4	9.52%	2.9	RR-Q09-DP02 (4.67-6 ft)	0	~~0~~	210	~~6.4~~
MTBE	c	42	0	0.00%	--		0	0	8,000	0.08
n-Propylbenzene	n	42	4	9.52%	5.8 J	RR-Q09-DP02 (4.67-6 ft)	0	~~0~~	340	~~9.9~~
Styrene	n	42	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	42	0	0.00%	--		0	0	8.6	0.023
Toluene	n	42	1	2.38%	0.29 J	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	5,000	~~10~~
1,1,1-Trichloroethane	n	42	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	42	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	42	3	7.14%	49 J	RR-Q09-DP02 (4.67-6 ft)	2	~~3~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	42	3	7.14%	21 J	RR-Q09-DP02 (4.67-6 ft)	0	~~3~~	78	~~1.2~~
m,p-Xylene	n	42	3	7.14%	9.3	RR-Q09-DP02 (4.67-6 ft)	0	~~0~~	59	~~94.74~~
o-Xylene	n	42	2	4.76%	0.68 J	RR-Q15-DP01 (4.67-6 ft)	0	~~0~~	69	~~100~~
Xylenes, Total	n	42	3	7.14%	9.3 J	RR-Q09-DP02 (4.67-6 ft)	0	~~0~~	600	~~200~~

TABLE 3.7-2. RAILROAD LOADING RACK SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
Acenaphthene	n	36	1	2.78%	0.088	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	4,000	~~200~~
Anthracene	n	36	7	19.44%	0.67 J	RR-Q13-DP02 (2-3.33 ft)	0	~~0~~	20,000	~~4,000~~
Benzo(a)anthracene	c	36	1	2.78%	0.019 J	RR-Q10-DP01 (4.67-6 ft)	0	0	50	10
Benzo(a)pyrene	c	36	2	5.56%	0.031	RR-Q10-DP01 (4.67-6 ft)	0	0	5	4
Benzo(b)fluoranthene	c	36	6	16.67%	0.041	RR-Q10-DP01 (4.67-6 ft)	0	0	50	50
Benzo(k)fluoranthene	c	36	2	5.56%	0.015 J	RR-Q10-DP01 (4.67-6 ft)	0	0	500	500
Bis(2-ethylhexyl)phthalate	c	36	0	0.00%	--		0	0	35	14
Chrysene	c	36	14	38.89%	0.69 J	RR-Q13-DP02 (2-3.33 ft)	0	0	5,000	2,000
Dibenz(a,h)acridine	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Dibenzo(a,h)anthracene	c	36	3	8.33%	0.01 J	RR-Q09-DP04 (4.67-6 ft), RR-Q10-DP01 (4.67-6 ft)	0	0	5	7
1,2-Dichlorobenzene	n	36	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
1,4-Dichlorobenzene	c	36	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	n	36	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
2,4-Dimethylphenol	n	36	0	0.00%	--		0	~~0~~	120	~~4.5~~
Dimethylphthalate	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Di-n-butylphthalate	n	36	0	0.00%	--		0	~~0~~	610	~~50.75~~
2,4-Dinitrophenol	n	36	0	0.00%	--		0	~~0~~	12	~~0.782~~
1,4-Dioxane	c	36	0	0.00%	--		0	0	4.9	0.0014
Fluoranthene	n	36	5	13.89%	0.079	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	2,000	~~500~~
Fluorene	n	36	9	25.00%	1.6 J	RR-Q13-DP02 (2-3.33 ft)	0	~~0~~	2,000	~~600~~
Indene	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Indeno(1,2,3-cd)pyrene	c	36	5	13.89%	0.035	RR-Q10-DP01 (4.67-6 ft)	0	0	50	100
Tetraethyl Lead	n	36	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
1-Methylnaphthalene	c	36	9	25.00%	3.6	RR-Q09-DP04 (4.67-6 ft)	0	6	16	0.051
2-Methylnaphthalene	n	36	5	13.89%	4	RR-Q09-DP04 (4.67-6 ft)	0	~~2~~	23	~~1.4~~
2-Methylphenol	n	36	0	0.00%	--		0	~~0~~	310	~~5.8~~
4-Methylphenol	n	36	0	0.00%	--		0	~~0~~	610	~~11~~
Naphthalene	n	36	8	22.22%	5.8	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	200	~~9~~
4-Nitrophenol	--	36	0	0.00%	--		0	~~0~~	NA	~~NA~~
Phenanthrene	--	36	14	38.89%	2.8 J	RR-Q13-DP02 (2-3.33 ft)	0	~~0~~	NA	~~NA~~
Phenol	n	36	0	0.00%	--		0	~~0~~	1,800	~~1.73~~
Pyrene	c	36	9	25.00%	0.11 J	RR-Q09-DP03 (2-3.33 ft), RR-Q09-DP04 (4.67-6 ft)	0	0	2,000	4,000
Pyridine	n	36	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	36	0	0.00%	--		0	0	0.16	0.00068
Thiophenol	n	36	0	0.00%	--		0	~~0~~	7.8	~~0.086~~

TABLE 3.7-2. RAILROAD LOADING RACK SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency[4]	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	42	6	14.29%	652 J	RR-Q09-DP04 (4.67-6 ft)	2	~~3~~	500	~~200~~
C9-C10, Aromatic, Adjusted	n	42	10	23.81%	780 J	RR-Q09-DP02 (4.67-6 ft)	0	~~5~~	1,000	~~100~~
C9-C12, Aliphatic, Adjusted	n	42	9	21.43%	1390 J	RR-Q09-DP02 (4.67-6 ft)	1	~~0~~	1,000	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	20	19	95.00%	1300	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	2,000	~~50,000~~
C11-C22, Aromatic, Adjusted	n	20	19	95.00%	700	RR-Q16-DP01 (2-3.33 ft)	0	~~8~~	4,000	~~400~~
C19-C36, Aliphatic, Adjusted	n	20	19	95.00%	1200	RR-Q13-DP03 (4.67-6 ft)	0	~~0~~	100,000	NA
Total Extractable Hydrocarbons	n	20	20	100.00%	2500	RR-Q09-DP04 (4.67-6 ft)	0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.8-1. FORMER WASTEWATER DISPOSAL AREA SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	5	0	0.00%	--		**0**	~~0~~	5	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	5	5	100.00%	23.9 J	FE-U08-DP01 (0-0.5 ft)	5	5	**0**	0.61	2.9	**25.1**
Barium, Total	n	5	5	100.00%	361 J	FE-U10-DP01 (0-0.5 ft)	**0**	~~0~~	0	**1,500**	~~414~~	392
Beryllium, Total	n	5	5	100.00%	1.35	FE-U10-DP01 (0-0.5 ft)	**0**	~~0~~	4	**16**	~~32~~	0.817
Cadmium, Total	n	5	5	100.00%	0.657 JB	FE-R07-DP01 (0-0.5 ft)	**0**	~~0~~	0	**7**	~~3.8~~	1.17
Chromium, Total	n	5	5	100.00%	39.9 J	FE-U08-DP01 (0-0.5 ft)	**0**	~~0~~	4	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	5	5	100.00%	9.47	FE-U10-DP01 (0-0.5 ft)	5	~~5~~	**2**	2.3	~~2.1~~	**9.13**
Copper, Total	n	5	5	100.00%	33.4	FE-U08-DP01 (0-0.5 ft)	**0**	~~0~~	3	**310**	~~460~~	26.6
Cyanide, Total	n	5	0	0.00%	--		**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	48	48	100.00%	1220 J	FE-V07-SS02 (0-0.25 ft)	**4**	32	45	**400**	~~140~~	30.2
Mercury, Total	n	5	5	100.00%	0.712 J	FE-U06-DP01 (0-0.5 ft)	**0**	~~0~~	3	**2.3**	~~NA~~	0.0837
Nickel, Total	n	5	5	100.00%	35.9	FE-U10-DP01 (0-0.5 ft)	**0**	~~0~~	3	**150**	~~147~~	32.6
Selenium, Total	n	5	5	100.00%	2.55	FE-T12-DP01 (0-0.5 ft)	**0**	~~0~~	4	**39**	~~2.6~~	2.09
Silver, Total	n	5	1	20.00%	0.26 J	FE-R07-DP01 (0-0.5 ft)	**0**	~~0~~	1	**39**	~~6~~	0.168
Vanadium, Total	n	5	5	100.00%	104 J	FE-U08-DP01 (0-0.5 ft)	5	~~0~~	**4**	39	~~780~~	**63.9**
Zinc, Total	n	5	5	100.00%	153 J	FE-R07-DP01 (0-0.5 ft)	**0**	~~0~~	3	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Benzene	c	5	0	0.00%	--		0	0	1	0.04
2-Butanone	n	5	0	0.00%	--		0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	5	0	0.00%	--		0	0	390	2.5
sec-Butylbenzene	n	5	0	0.00%	--		0	0	780	4.6
tert-Butylbenzene	n	5	0	0.00%	--		0	0	780	1.1
Carbon Disulfide	n	5	0	0.00%	--		0	~~0~~	82	~~2.1~~
Chlorobenzene	n	5	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	5	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	5	0	0.00%	--		0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	5	0	0.00%	--		0	0	0.04	0.00002
1,1-Dichloroethane	c	5	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	5	0	0.00%	--		0	0	0.5	0.01
Ethylbenzene	c	5	0	0.00%	--		0	0	6	10
Hexane	n	5	0	0.00%	--		0	~~0~~	57	~~18~~
Isopropylbenzene	n	5	0	0.00%	--		0	~~0~~	210	~~6.4~~
MTBE	c	5	0	0.00%	--		0	0	40	0.08
n-Propylbenzene	n	5	0	0.00%	--		0	~~0~~	340	~~9.9~~
Styrene	n	5	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	5	0	0.00%	--		0	0	8.6	0.023
Toluene	n	5	0	0.00%	--		0	~~0~~	600	~~10~~
1,1,1-Trichloroethane	n	5	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	5	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	5	0	0.00%	--		0	~~0~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	5	0	0.00%	--		0	~~0~~	78	~~1.2~~
m,p-Xylene	n	5	0	0.00%	--		0	~~0~~	59	~~94.74~~
o-Xylene	n	5	0	0.00%	--		0	~~0~~	69	~~100~~
Xylenes, Total	n	5	0	0.00%	--		0	~~0~~	70	~~200~~

TABLE 3.8-1. FORMER WASTEWATER DISPOSAL AREA SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Acenaphthene	n	9	0	0.00%	--		0	~~0~~	400	~~200~~
Anthracene	n	9	3	33.33%	0.033	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	2,000	~~4,000~~
Benzo(a)anthracene	c	9	1	11.11%	0.017 J	FES1-R04-SS02 (0-0.5 ft)	0	0	0.2	10
Benzo(a)pyrene	c	9	0	0.00%	--		0	0	0.02	4
Benzo(b)fluoranthene	c	9	2	22.22%	0.0079 J	FES1-R04-SS02 (0-0.5 ft)	0	0	0.2	50
Benzo(k)fluoranthene	c	9	1	11.11%	0.0051 J	FES1-R04-SS02 (0-0.5 ft)	0	0	2	500
Bis(2-ethylhexyl)phthalate	c	9	0	0.00%	--		0	0	35	14
Chrysene	c	9	5	55.56%	0.051	FE-U08-DP01 (0-0.5 ft)	0	0	20	2,000
Dibenz(a,h)acridine	--	9	0	0.00%	--		0	0	NA	NA
Dibenzo(a,h)anthracene	c	9	0	0.00%	--		0	0	0.02	7
1,2-Dichlorobenzene	n	9	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	9	0	0.00%	--		0	0	NA	NA
1,4-Dichlorobenzene	c	9	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	n	9	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
2,4-Dimethylphenol	n	9	2	22.22%	0.11	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	120	~~4.5~~
Dimethylphthalate	--	9	0	0.00%	--		0	0	NA	NA
Di-n-butylphthalate	n	9	0	0.00%	--		0	~~0~~	610	~~50.75~~
2,4-Dinitrophenol	n	9	0	0.00%	--		0	~~0~~	12	~~0.782~~
1,4-Dioxane	c	9	0	0.00%	--		0	0	4.9	0.0014
Fluoranthene	n	9	3	33.33%	0.007 J	FE-R07-DP01 (0-0.5 ft)	0	~~0~~	300	~~500~~
Fluorene	n	9	0	0.00%	--		0	~~0~~	300	~~600~~
Indene	--	9	1	11.11%	0.2 J	FES1-R04-SS01 (0-0.5 ft)	0	0	NA	NA
Indeno(1,2,3-cd)pyrene	c	9	1	11.11%	0.032	FE-U06-DP01 (0-0.5 ft)	0	0	0.2	100
Tetraethyl Lead	n	5	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
1-Methylnaphthalene	c	9	5	55.56%	0.032	FE-U08-DP01 (0-0.5 ft)	0	0	16	0.051
2-Methylnaphthalene	n	9	4	44.44%	0.059	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	23	~~1.4~~
2-Methylphenol	n	9	0	0.00%	--		0	~~0~~	310	~~5.8~~
4-Methylphenol	n	9	0	0.00%	--		0	~~0~~	610	~~11~~
Naphthalene	n	9	4	44.44%	0.02 J	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	4	~~9~~
4-Nitrophenol	--	9	0	0.00%	--		0	0	NA	NA
Phenanthrene	--	9	7	77.78%	0.017 J	FE-U08-DP01 (0-0.5 ft)	0	0	NA	NA
Phenol	n	9	0	0.00%	--		0	~~0~~	1,800	~~1.73~~
Pyrene	c	9	3	33.33%	0.039	FE-U08-DP01 (0-0.5 ft)	0	0	200	4,000
Pyridine	n	9	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	9	0	0.00%	--		0	0	0.16	0.00068
Thiophenol	n	9	1	11.11%	1.7 J	FE-U08-DP01 (0-0.5 ft)	0	~~1~~	7.8	~~0.086~~

TABLE 3.8-1. FORMER WASTEWATER DISPOSAL AREA SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	5	0	0.00%	--		0	~~0~~	60	~~200~~
C9-C10, Aromatic, Adjusted	n	5	0	0.00%	--		0	~~0~~	100	~~100~~
C9-C12, Aliphatic, Adjusted	n	5	0	0.00%	--		0	~~0~~	100	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	2	2	40.00%	68	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	200	~~50,000~~
C11-C22, Aromatic, Adjusted	n	2	2	40.00%	200	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	500	~~400~~
C19-C36, Aliphatic, Adjusted	n	2	2	40.00%	250	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	20,000	NA
Total Extractable Hydrocarbons	n	5	2	40.00%	1300	FE-U08-DP01 (0-0.5 ft)	0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.8-2. FORMER WASTEWATER DISPOSAL AREA SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	7	0	0.00%	--		**0**	~~0~~	7	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	7	7	100.00%	19.7 J	FE-U08-DP01 (3-4 ft)	7	7	**0**	0.61	2.9	**25.1**
Barium, Total	n	7	7	100.00%	371 J	FE-U06-DP01 (3-4 ft)	**0**	~~0~~	0	**1,500**	~~414~~	392
Beryllium, Total	n	7	7	100.00%	1.41 JB	FE-R10-DP01 (2-4 ft)	**0**	~~0~~	6	**16**	~~32~~	0.817
Cadmium, Total	n	7	6	85.71%	1.06	FE-R08-DP01 (6-8 ft)	**0**	~~0~~	0	**7**	~~3.8~~	1.17
Chromium, Total	n	7	7	100.00%	40.7 J	FE-U06-DP01 (3-4 ft)	**0**	~~0~~	5	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	7	7	100.00%	8.98	FE-R08-DP01 (6-8 ft)	7	~~7~~	**0**	2.3	~~2.1~~	**9.13**
Copper, Total	n	7	7	100.00%	23.6	FE-R10-DP01 (2-4 ft)	**0**	~~0~~	0	**310**	~~460~~	26.6
Cyanide, Total	n	7	0	0.00%	--		**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	7	7	100.00%	17.5 J	FE-T12-DP01 (3-4 ft)	**0**	~~0~~	0	**400**	~~140~~	30.2
Mercury, Total	n	7	7	100.00%	0.0423 JB	FE-R07-DP01 (4.67-6 ft)	**0**	~~0~~	0	**2.3**	~~NA~~	0.0837
Nickel, Total	n	7	7	100.00%	36	FE-U06-DP01 (3-4 ft)	**0**	~~0~~	4	**150**	~~147~~	32.6
Selenium, Total	n	7	4	57.14%	3.16	FE-U08-DP01 (3-4 ft)	**0**	~~1~~	2	**39**	~~2.6~~	2.09
Silver, Total	n	7	1	14.29%	0.27 J	FE-R07-DP01 (4.67-6 ft)	**0**	~~0~~	3	**39**	~~6~~	0.168
Vanadium, Total	n	7	7	100.00%	106 J	FE-U06-DP01 (3-4 ft)	6	~~0~~	**5**	39	~~780~~	**63.9**
Zinc, Total	n	7	7	100.00%	116	FE-U06-DP01 (3-4 ft)	**0**	~~0~~	0	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
Benzene	c	7	0	0.00%	--		0	0	200	0.04
2-Butanone	n	7	0	0.00%	--		0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	7	0	0.00%	--		0	0	390	2.5
sec-Butylbenzene	n	7	0	0.00%	--		0	0	780	4.6
tert-Butylbenzene	n	7	0	0.00%	--		0	0	780	1.1
Carbon Disulfide	n	7	0	0.00%	--		0	~~0~~	82	~~2.1~~
Chlorobenzene	n	7	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	7	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	7	0	0.00%	--		0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	7	0	0.00%	--		0	0	7	0.00002
1,1-Dichloroethane	c	7	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	7	0	0.00%	--		0	0	104	0.01
Ethylbenzene	c	7	0	0.00%	--		0	0	1,000	10
Hexane	n	7	0	0.00%	--		0	~~0~~	57	~~18~~
Isopropylbenzene	n	7	0	0.00%	--		0	~~0~~	210	~~6.4~~
MTBE	c	7	0	0.00%	--		0	0	8,000	0.08
n-Propylbenzene	n	7	0	0.00%	--		0	~~0~~	340	~~9.9~~
Styrene	n	7	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	7	0	0.00%	--		0	0	8.6	0.023
Toluene	n	7	0	0.00%	--		0	~~0~~	5,000	~~10~~
1,1,1-Trichloroethane	n	7	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	7	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	7	0	0.00%	--		0	~~0~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	7	0	0.00%	--		0	~~0~~	78	~~1.2~~
m,p-Xylene	n	7	0	0.00%	--		0	~~0~~	59	~~94.74~~
o-Xylene	n	7	0	0.00%	--		0	~~0~~	69	~~100~~
Xylenes, Total	n	7	0	0.00%	--		0	~~0~~	600	~~200~~

TABLE 3.8-2. FORMER WASTEWATER DISPOSAL AREA SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
Acenaphthene	n	7	0	0.00%	--		0	~~0~~	4,000	~~200~~
Anthracene	n	7	0	0.00%	--		0	~~0~~	20,000	~~4,000~~
Benzo(a)anthracene	c	7	0	0.00%	--		0	0	50	10
Benzo(a)pyrene	c	7	0	0.00%	--		0	0	5	4
Benzo(b)fluoranthene	c	7	0	0.00%	--		0	0	50	50
Benzo(k)fluoranthene	c	7	0	0.00%	--		0	0	500	500
Bis(2-ethylhexyl)phthalate	c	7	0	0.00%	--		0	0	35	14
Chrysene	c	7	0	0.00%	--		0	0	5,000	2,000
Dibenz(a,h)acridine	--	7	0	0.00%	--		0	0	NA	NA
Dibenzo(a,h)anthracene	c	7	0	0.00%	--		0	0	5	7
1,2-Dichlorobenzene	n	7	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	7	0	0.00%	--		0	0	NA	NA
1,4-Dichlorobenzene	c	7	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	n	7	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
2,4-Dimethylphenol	n	7	0	0.00%	--		0	~~0~~	120	~~4.5~~
Dimethylphthalate	--	7	0	0.00%	--		0	0	NA	NA
Di-n-butylphthalate	n	7	0	0.00%	--		0	~~0~~	610	~~50.75~~
2,4-Dinitrophenol	n	7	0	0.00%	--		0	~~0~~	12	~~0.782~~
1,4-Dioxane	c	7	0	0.00%	--		0	0	4.9	0.0014
Fluoranthene	n	7	0	0.00%	--		0	~~0~~	2,000	~~500~~
Fluorene	n	7	0	0.00%	--		0	~~0~~	2,000	~~600~~
Indene	--	7	1	14.29%	0.21	FE-U08-DP01 (3-4 ft)	0	0	NA	NA
Indeno(1,2,3-cd)pyrene	c	7	0	0.00%	--		0	0	50	100
Tetraethyl Lead	n	7	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
1-Methylnaphthalene	c	7	0	0.00%	--		0	0	16	0.051
2-Methylnaphthalene	n	7	0	0.00%	--		0	~~0~~	23	~~1.4~~
2-Methylphenol	n	7	0	0.00%	--		0	~~0~~	310	~~5.8~~
4-Methylphenol	n	7	0	0.00%	--		0	~~0~~	610	~~11~~
Naphthalene	n	7	0	0.00%	--		0	~~0~~	200	~~9~~
4-Nitrophenol	--	7	0	0.00%	--		0	0	NA	NA
Phenanthrene	--	7	0	0.00%	--		0	0	NA	NA
Phenol	n	7	0	0.00%	--		0	~~0~~	1,800	~~1.73~~
Pyrene	c	7	0	0.00%	--		0	0	2,000	4,000
Pyridine	n	7	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	7	0	0.00%	--		0	0	0.16	0.00068
Thiophenol	n	7	0	0.00%	--		0	~~0~~	7.8	~~0.086~~

TABLE 3.8-2. FORMER WASTEWATER DISPOSAL AREA SUBSURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency[4]	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL[2] (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs[2] (Subsurface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	7	0	0.00%	--		0	~~0~~	500	~~200~~
C9-C10, Aromatic, Adjusted	n	7	0	0.00%	--		0	~~0~~	1,000	~~100~~
C9-C12, Aliphatic, Adjusted	n	7	0	0.00%	--		0	~~0~~	1,000	~~10,000~~
Total Extractable Hydrocarbons	n	7	0	0.00%	--		0	~~0~~	NA	NA

Notes:

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.9-1. NON-PETROLEUM SOURCES INVESTIGATION, SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances[2]	Site-Specific Background Value[3] Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs[2] (mg/kg)	Site-Specific Background Values[3] (mg/kg)
Antimony, Total	n	15	1	6.67%	1.37 JB	DEQ-SS01-SS02 (0-1.5 ft)	**0**	~~0~~	15	**3.1**	~~2.7~~	0.368
Arsenic, Total	c	15	15	100.00%	16.5	OIL_VAT-2 (0.17-0.5 ft)	15	15	**0**	0.61	2.9	**25.1**
Barium, Total	n	15	15	100.00%	775 J	DEQ-SS01-SS02 (0-1.5 ft)	**0**	~~1~~	1	**1,500**	~~414~~	392
Beryllium, Total	n	15	15	100.00%	0.813	OIL_VAT-1 (0.17-0.5 ft)	**0**	~~0~~	0	**16**	~~32~~	0.817
Cadmium, Total	n	15	15	100.00%	3.72	DEQ-SS01-SS02 (0-1.5 ft)	**0**	~~0~~	9	**7**	~~3.8~~	1.17
Chromium, Total	n	15	15	100.00%	33 J	DEQ-SS04-SS01 (0-1.5 ft)	**0**	~~0~~	2	**12,000**	~~1,800,000~~	30.8
Cobalt, Total	n	15	15	100.00%	9.03	DEQ-SS01-SS02 (0-1.5 ft)	15	~~15~~	**0**	2.3	~~2.1~~	**9.13**
Copper, Total	n	15	15	100.00%	76.5 JB	DEQ-SS01-SS02 (0-1.5 ft)	**0**	~~0~~	10	**310**	~~460~~	26.6
Cyanide, Total	n	15	3	20.00%	1.6	DEQ-SS01-SS02 (0-1.5 ft)	**0**	~~0~~	0	**4.7**	~~20~~	NA
Lead, Total	L*	15	15	100.00%	244	DEQ-SS01-SS02 (0-1.5 ft)	**0**	~~1~~	10	**400**	~~140~~	30.2
Mercury, Total	n	15	14	93.33%	0.122 J	DEQ-SS03-SS01 (0-1.5 ft)	**0**	~~0~~	2	**2.3**	~~NA~~	0.0837
Nickel, Total	n	15	15	100.00%	25.7	DEQ-SS07-SS01 (0-1.5 ft)	**0**	~~0~~	0	**150**	~~147~~	32.6
Selenium, Total	n	15	6	40.00%	1.57 J	OIL_VAT-3 (0-0.17 ft)	**0**	~~0~~	0	**39**	~~2.6~~	2.09
Silver, Total	n	15	1	6.67%	0.255 J	DEQ-SS03-SS01 (0-1.5 ft)	**0**	~~0~~	4	**39**	~~6~~	0.168
Vanadium, Total	n	15	15	100.00%	60.7 J	DEQ-SS07-SS01 (0-1.5 ft)	13	~~0~~	**0**	39	~~780~~	**63.9**
Zinc, Total	n	15	15	100.00%	2480 J	DEQ-SS01-SS03 (0-0.5 ft)	**1**	~~0~~	9	**2,300**	~~2,900~~	119

** - see Section 3.1 of the report for discussion of the project approach to arsenic, cobalt, and vanadium.

Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Benzene	c	15	0	0.00%	--		0	0	1	0.04
2-Butanone	n	15	0	0.00%	--		0	~~0~~	2,800	~~10~~
n-Butylbenzene	n	15	0	0.00%	--		0	0	390	2.5
sec-Butylbenzene	n	15	0	0.00%	--		0	0	780	4.6
tert-Butylbenzene	n	15	0	0.00%	--		0	0	780	1.1
Carbon Disulfide	n	15	0	0.00%	--		0	~~0~~	82	~~2.1~~
Chlorobenzene	n	15	0	0.00%	--		0	~~0~~	29	~~0.68~~
Chloroform	c	15	0	0.00%	--		0	0	0.29	0.2
Cyclohexane	n	15	0	0.00%	--		0	~~0~~	700	~~130~~
1,2-Dibromoethane	c	15	0	0.00%	--		0	0	0.04	0.00002
1,1-Dichloroethane	c	15	0	0.00%	--		0	0	3.3	0.0068
1,2-Dichloroethane	c	15	0	0.00%	--		0	0	0.5	0.01
Ethylbenzene	c	15	0	0.00%	--		0	0	6	10
Hexane	n	15	0	0.00%	--		0	~~0~~	57	~~18~~
Isopropylbenzene	n	15	0	0.00%	--		0	~~0~~	210	~~6.4~~
MTBE	c	15	0	0.00%	--		0	0	40	0.08
n-Propylbenzene	n	15	0	0.00%	--		0	~~0~~	340	~~9.9~~
Styrene	n	15	0	0.00%	--		0	~~0~~	630	~~1.1~~
Tetrachloroethene	c	15	0	0.00%	--		0	0	8.6	0.023
Toluene	n	15	0	0.00%	--		0	~~0~~	600	~~10~~
1,1,1-Trichloroethane	n	15	0	0.00%	--		0	~~0~~	870	~~0.7~~
Trichloroethene	c	15	0	0.00%	--		0	0	0.44	0.018
1,2,4-Trimethylbenzene	n	15	0	0.00%	--		0	~~0~~	6.2	~~0.21~~
1,3,5-Trimethylbenzene	n	15	0	0.00%	--		0	~~0~~	78	~~1.2~~
m,p-Xylene	n	15	0	0.00%	--		0	~~0~~	59	~~94.74~~
o-Xylene	n	15	0	0.00%	--		0	~~0~~	69	~~100~~
Xylenes, Total	n	15	0	0.00%	--		0	~~0~~	70	~~200~~

TABLE 3.9-1. NON-PETROLEUM SOURCES INVESTIGATION, SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
Acenaphthene	n	15	7	46.67%	2.4 J	DEQ-SS03-SS03 (0-1.5 ft)	0	~~0~~	400	~~200~~
Anthracene	n	15	9	60.00%	6.5 J	DEQ-SS03-SS03 (0-1.5 ft)	0	~~0~~	2,000	~~4,000~~
Benzo(a)anthracene	c	15	11	73.33%	15 J	DEQ-SS03-SS03 (0-1.5 ft)	6	2	0.2	10
Benzo(a)pyrene	c	15	11	73.33%	12 J	DEQ-SS03-SS03 (0-1.5 ft)	11	2	0.02	4
Benzo(b)fluoranthene	c	15	13	86.67%	35 J	DEQ-SS02-COMP (0-1.5 ft)	8	0	0.2	50
Benzo(k)fluoranthene	c	15	11	73.33%	9.8 J	DEQ-SS02-COMP (0-1.5 ft)	3	0	2	500
Bis(2-ethylhexyl)phthalate	c	15	2	13.33%	0.14 J	DEQ-SS01-SS03 (0-0.5 ft)	0	0	35	14
Chrysene	c	15	13	86.67%	33 J	DEQ-SS02-COMP (0-1.5 ft)	1	0	20	2,000
Dibenz(a,h)acridine	--	15	2	13.33%	1.6 J	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
Dibenzo(a,h)anthracene	c	15	9	60.00%	2.4 J	DEQ-SS02-COMP (0-1.5 ft)	7	0	0.02	7
1,2-Dichlorobenzene	n	3	0	0.00%	--		0	~~0~~	190	~~5.8~~
1,3-Dichlorobenzene	--	3	0	0.00%	--		0	0	NA	NA
1,4-Dichlorobenzene	c	3	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	n	15	0	0.00%	--		0	~~0~~	4,900	~~72.64~~
2,4-Dimethylphenol	n	15	1	6.67%	0.028 J	DEQ-SS01-SS03 (0-0.5 ft)	0	~~0~~	120	~~4.5~~
Dimethylphthalate	--	15	0	0.00%	--		0	0	NA	NA
Di-n-butylphthalate	n	15	0	0.00%	--		0	~~0~~	610	~~50.75~~
2,4-Dinitrophenol	n	15	0	0.00%	--		0	~~0~~	12	~~0.782~~
1,4-Dioxane	c	3	0	0.00%	--		0	0	4.9	0.0014
Fluoranthene	n	15	13	86.67%	39 J	DEQ-SS02-COMP (0-1.5 ft)	0	~~0~~	300	~~500~~
Fluorene	n	15	9	60.00%	2.4 J	DEQ-SS03-SS03 (0-1.5 ft)	0	~~0~~	300	~~600~~
Indene	--	15	0	0.00%	--		0	0	NA	NA
Indeno(1,2,3-cd)pyrene	c	15	9	60.00%	7.2 J	DEQ-SS02-COMP (0-1.5 ft)	5	0	0.2	100
Tetraethyl Lead	n	15	0	0.00%	--		0	~~0~~	0.00061	~~0.000035~~
1-Methylnaphthalene	c	15	9	60.00%	16	DEQ-SS06-SS01 (0-1.5 ft)	0	6	16	0.051
2-Methylnaphthalene	n	15	9	60.00%	28 J	DEQ-SS06-SS01 (0-1.5 ft)	1	~~1~~	23	~~1.4~~
2-Methylphenol	n	15	1	6.67%	2.8 J	DEQ-SS04-SS01 (0-1.5 ft)	0	~~0~~	310	~~5.8~~
4-Methylphenol	n	15	4	26.67%	0.11 J	DEQ-SS03-SS02 (0-1.5 ft)	0	~~0~~	610	~~11~~
Naphthalene	n	15	4	26.67%	8.1 J	DEQ-SS06-SS01 (0-1.5 ft)	1	~~0~~	4	~~9~~
4-Nitrophenol	--	15	0	0.00%	--		0	0	NA	NA
Phenanthrene	--	15	11	73.33%	28 J	DEQ-SS03-SS03 (0-1.5 ft)	0	0	NA	NA
Phenol	n	15	2	13.33%	68	DEQ-SS04-SS01 (0-1.5 ft)	0	~~1~~	1,800	~~1.73~~
Pyrene	c	15	13	86.67%	29 J	DEQ-SS02-COMP (0-1.5 ft), DEQ-SS03-SS03 (0-1.5 ft)	0	0	200	4,000
Pyridine	n	15	0	0.00%	--		0	~~0~~	7.8	~~0.053~~
Quinoline	c	15	0	0.00%	--		0	0	0.16	0.00068
Thiophenol	n	15	0	0.00%	--		0	~~0~~	7.8	~~0.086~~

TABLE 3.9-1. NON-PETROLEUM SOURCES INVESTIGATION, SURFACE SOIL DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Carcinogen or Non-Carcinogen[1]	Number of Samples	Detect Count	Detection Frequency[4]	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Surface Soil) SL Exceedances	MTGW SL[2] (Surface Soil) Exceedances	Direct Contact (Surface Soil) SLs (mg/kg)	MTGW SLs[2] (Surface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	n	15	0	0.00%	--		0	0	~~60~~	~~200~~
C9-C10, Aromatic, Adjusted	n	15	0	0.00%	--		0	0	~~100~~	~~100~~
C9-C12, Aliphatic, Adjusted	n	15	0	0.00%	--		0	0	~~100~~	~~10,000~~
C9-C18, Aliphatic, Adjusted	n	13*	8	53.33%	27000 J	DEQ-SS04-SS01 (0-1.5 ft)	2	0	~~200~~	~~50,000~~
C11-C22, Aromatic, Adjusted	n	13*	13	86.67%	64000	DEQ-SS04-SS01 (0-1.5 ft)	5	6	~~500~~	~~400~~
C19-C36, Aliphatic, Adjusted	n	13*	13	86.67%	110000 J	DEQ-SS04-SS01 (0-1.5 ft)	1	0	~~20,000~~	NA
Total Extractable Hydrocarbons	n	15*	13	86.67%	4800 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA

Notes:

* Sample counts were adjusted to reflect the following: Typically samples are analyzed for Total Extractable Hydrocarbons (T.E.H.) and then analyzed for the three heaviest fractions (C9-C18, C11-C22, and C19-C36) only if the initial T.E.H. screen result is 200 mg/kg or greater. The 12 "DEQ"-prefix samples were analyzed for T.E.H.; 10 of those samples had T.E.H. > 200 mg/kg and were therefore analyzed for the heaviest carbon fractions. However, based on visual inspection, the three "Oil_Vat"-prefix samples were submitted for the carbon fraction analysis without prior T.E.H. analysis (i.e., it was assumed that the T.E.H. would be above 200 mg/kg). Therefore, the total number of samples collected for the T.E.H./heaviest fraction analyses is reported here as 15.

[1] - "c" indicates constituent is a carcinogen; "n" indicates non-carcinogen; "--" indicates constituent not included in classification system. "L*" indicates that lead is handled as a special case, per MDEQ and U.S. EPA. Classification per U.S. EPA RSL Table (5/2013).

[2] - Evaluation presented in the text and on the summary maps assumes that site groundwater will be classified as Class IV Groundwater. In Class IV Groundwater, MTGW SLs apply only to carcinogens.

[3] - MDEQ-approved background values (as presented in June 3, 2013 submittal by CEMC). For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

[4] - Samples analyzed for T.E.H. are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

~~strikethrough font~~ - indicates that the SL is not applicable to the constituent

bold-oversized font - indicates the SL that is applicable to the constituent (applies to inorganics only)

ft-bgs - feet below ground surface

J - estimated concentration

JB - estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 3.9-2. SUMMARY OF ADDITIONAL CONSTITUENTS DETECTED DURING INVESTIGATION OF IMPACTS FROM NON-PETROLEUM SOURCES
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Additional Detected Inorganic Constituents	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Non-COI Direct Exposure SL (5/2013) Exceedences	Non-COI MTGW SL (5/2013) Exceedences	Non-COI Direct Exposure SL (5/2013)	Non-COI MTGW SL (5/2013)
Aluminum, Total	12	12	100.00%	20900	DEQ-SS03-SS02 (0-1.5 ft)	13	0	7,700	230,000
Calcium, Total	12	12	100.00%	60000	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
Iron, Total	12	12	100.00%	28400	DEQ-SS03-SS01 (0-1.5 ft)	13	13	5,500	2,700
Magnesium, Total	12	12	100.00%	9310	DEQ-SS01-SS04 (0-0.5 ft)	0	0	NA	NA
Manganese, Total	12	12	100.00%	361 J	DEQ-SS01-SS02 (0-1.5 ft)	13	13	180	210
Potassium, Total	12	12	100.00%	4920 J	DEQ-SS05-COMP (0-1.5 ft), DEQ-SS07-SS01 (0-1.5 ft)	0	0	NA	NA
Sodium, Total	12	12	100.00%	50600	DEQ-SS03-SS03 (0-1.5 ft) Dup	0	0	NA	NA
Tin, Total	12	12	100.00%	27.2	DEQ-SS01-SS02 (0-1.5 ft)	0	0	4,700	23,000

Additional Detected VOCs	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Non-COI Direct Exposure SL (5/2013) Exceedences	Non-COI MTGW SL (5/2013) Exceedences	Non-COI Direct Exposure SL (5/2013)	Non-COI MTGW SL (5/2013)
Acetone	12	11	91.67%	0.03	DEQ-SS07-SS01 (1.5-2 ft)	0	0	6,100	24
Methylene Chloride	12	12	100.00%	0.11	DEQ-SS07-SS01 (1.5-2 ft)	0	11	56	0.013

Additional Detected SVOCs	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Non-COI Direct Exposure SL (5/2013) Exceedences	Non-COI MTGW SL (5/2013) Exceedences	Non-COI Direct Exposure SL (5/2013)	Non-COI MTGW SL (5/2013)
3-Methylcholanthrene	12	1	8.33%	0.38 J	DEQ-SS03-SS03 (0-1.5 ft)	1	1	0.0052	0.019
N-Nitrosodiphenylamine	12	1	8.33%	1.4 J	DEQ-SS06-SS01 (0-1.5 ft)	0	0	99	1.881
Acenaphthylene	12	9	75.00%	0.48	DEQ-SS02-COMP (0-1.5 ft)	0	0	NA	NA
Acetophenone	12	3	25.00%	0.24	DEQ-SS01-SS03 (0-0.5 ft)	0	0	780	4.5
Benzo(g,h,i)perylene	12	12	100.00%	7.3 J	DEQ-SS02-COMP (0-1.5 ft)	0	0	NA	NA
Benzoic Acid	12	1	8.33%	0.2 J	DEQ-SS01-SS04 (0-0.5 ft)	0	0	24,000	140
Biphenyl	12	5	41.67%	1.4 J	DEQ-SS06-SS01 (0-1.5 ft)	0	2	5.1	0.087
Butylbenzylphthalate	12	1	8.33%	4.2 J	DEQ-SS06-SS01 (0-1.5 ft)	0	0	260	214.285714
Caprolactam	12	1	8.33%	0.06 J	DEQ-SS01-SS03 (0-0.5 ft)	0	0	3,100	19
Carbazole	12	6	50.00%	4.6 J	DEQ-SS03-SS03 (0-1.5 ft)	0	0	NA	NA
4-Chloroaniline	12	1	8.33%	0.22	DEQ-SS03-SS01 (0-1.5 ft)	0	1	2.4	0.0013
Dibenzofuran	12	5	41.67%	1.2 J	DEQ-SS03-SS03 (0-1.5 ft)	0	1	7.8	1.1
2,4-DDE	15	1	6.67%	0.096 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
Aldrin	15	1	6.67%	0.0028 J	DEQ-SS01-SS02 (0-1.5 ft), DEQ-SS03-SS03 (0-1.5 ft) Dup	0	0	0.029	0.0325
a-BHC	15	1	6.67%	0.00027 J	DEQ-SS01-SS01 (0-1.5 ft)	0	0	0.077	0.00151
b-BHC	15	1	6.67%	0.0051 J	DEQ-SS01-SS04 (0-0.5 ft)	0	0	0.27	0.005377
g-BHC (Lindane)	15	4	26.67%	0.048 J	DEQ-SS02-COMP (0-1.5 ft)	0	3	0.52	0.012
Chlordane	15	1	6.67%	0.0088 J	DEQ-SS01-SS01 (0-1.5 ft)	0	0	1.6	0.684211
alpha-Chlordane	15	6	40.00%	0.065 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
beta-Chlordane	15	4	26.67%	0.017 J	DEQ-SS03-SS03 (0-1.5 ft)	0	0	NA	NA
2,4-D1	15	1	6.67%	0.054 J	DEQ-SS06-SS01 (0-1.5 ft)	0	0	69	0.35
2,4-DB	15	2	13.33%	0.065	DEQ-SS05-COMP (0-1.5 ft)	0	0	49	0.36
4,4-DDD	15	9	60.00%	0.46 J	DEQ-SS04-SS01 (0-1.5 ft)	0	4	2	0.007348
2,4-DDD	15	2	13.33%	0.091 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
4,4-DDE	15	8	53.33%	0.092 J	DEQ-SS04-SS01 (0-1.5 ft)	0	6	1.4	0.00506
4,4-DDT	15	11	73.33%	0.31 J	DEQ-SS04-SS01 (0-1.5 ft)	0	8	1.7	0.00737
2,4-DDT	15	6	40.00%	0.01 J	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Dieldrin	15	3	20.00%	0.005 J	DEQ-SS03-SS02 (0-1.5 ft)	0	0	0.03	0.008133
Endosulfan I	15	5	33.33%	0.13 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
Endosulfan II	15	6	40.00%	0.33 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
Endosulfan sulfate	15	4	26.67%	0.011 J	DEQ-SS03-SS03 (0-1.5 ft)	0	0	NA	NA
Endrin	15	3	20.00%	0.28 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
Endrin aldehyde	15	5	33.33%	0.54 J	DEQ-SS04-SS01 (0-1.5 ft)	0	0	NA	NA
Heptachlor	15	1	6.67%	0.0026 J	DEQ-SS01-SS02 (0-1.5 ft)	0	0	0.11	0.062222
Heptachlor epoxide	15	3	20.00%	0.011	DEQ-SS06-SS01 (0-1.5 ft)	0	1	0.053	0.008242
Hexachlorobenzene	27	3	11.11%	0.0029 J	DEQ-SS05-COMP (0-1.5 ft)	0	0	0.3	0.025238
Hexachlorophene	12	1	8.33%	0.13 J	DEQ-SS03-SS01 (0-1.5 ft)	0	0	1.8	63
Isobenzan	15	2	13.33%	0.0089	DEQ-SS06-SS01 (0-1.5 ft)	0	0	NA	NA
MCPA	15	3	20.00%	1.5 J	DEQ-SS06-SS01 (0-1.5 ft)	0	3	3.1	0.010526
Methoxychlor	15	4	26.67%	0.081 J	DEQ-SS03-SS03 (0-1.5 ft)	0	0	31	22
Mirex	15	2	13.33%	0.0055 J	DEQ-SS03-SS03 (0-1.5 ft)	0	0	0.027	7.297297

TABLE 3.9-2. SUMMARY OF ADDITIONAL CONSTITUENTS DETECTED DURING INVESTIGATION OF IMPACTS FROM NON-PETROLEUM SOURCES
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Additional Detected SVOCs	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Non-COI Direct Exposure SL (5/2013) Exceedences	Non-COI MTGW SL (5/2013) Exceedences	Non-COI Direct Exposure SL (5/2013)	Non-COI MTGW SL (5/2013)
PCB-1254	15	1	6.67%	0.45	DEQ-SS04-SS01 (0-1.5 ft)	1	1	0.22	0.088
PCB-1260	15	3	20.00%	0.074	DEQ-SS03-SS01 (0-1.5 ft)	0	0	0.22	0.24
Pentachlorophenol	15	9	60.00%	0.23 J	DEQ-SS02-COMP (0-1.5 ft)	0	1	0.89	0.1
2,4,5-T	15	4	26.67%	0.0042	DEQ-SS03-SS01 (0-1.5 ft)	0	0	61	0.52
2,4,5-TP (Silvex)	15	1	6.67%	0.0026 J	DEQ-SS01-SS04 (0-0.5 ft)	0	0	49	0.28

Detected Dioxins and Furans	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Non-COI Direct Exposure SL (5/2013) Exceedences	Non-COI MTGW SL (5/2013) Exceedences	Non-COI Direct Exposure SL (5/2013)	Non-COI MTGW SL (5/2013)
2,3,7,8-TCDD	15	12	80.00%	2.53	DEQ-SS01-SS02 (0-1.5 ft)	0	0	4.5	2.6
1,2,3,7,8-PeCDD	15	15	100.00%	10.1	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
1,2,3,4,7,8-HxCDD	15	14	93.33%	17.1	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
1,2,3,6,7,8-HxCDD	15	14	93.33%	62.4	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
1,2,3,7,8,9-HxCDD	15	15	100.00%	34.7	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
1,2,3,4,6,7,8-HpCDD	15	15	100.00%	1740 J	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
OCDD	15	15	100.00%	15300 J	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
2,3,7,8-TCDF	15	11	73.33%	2.62	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
1,2,3,7,8-PeCDF	15	14	93.33%	2.49 JB	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
2,3,4,7,8-PeCDF	15	12	80.00%	8.92	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
1,2,3,4,7,8-HxCDF	15	14	93.33%	25.7	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
1,2,3,6,7,8-HxCDF	15	14	93.33%	15.2	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
1,2,3,7,8,9-HxCDF	15	13	86.67%	3.79 JB	DEQ-SS03-SS02 (0-1.5 ft)	0	0	NA	NA
2,3,4,6,7,8-HxCDF	15	14	93.33%	18.1	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
1,2,3,4,6,7,8-HpCDF	15	15	100.00%	488 J	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
1,2,3,4,7,8,9-HpCDF	15	15	100.00%	28.4	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
OCDF	15	15	100.00%	1650	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total HpCDD	15	14	93.33%	3480	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total HpCDF	15	14	93.33%	1670	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total HxCDD	15	14	93.33%	438 J	DEQ-SS03-SS01 (0-1.5 ft)	0	0	NA	NA
Total HxCDF	15	15	100.00%	458	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total PCDD	15	15	100.00%	19200	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total PCDD/PCDF	15	15	100.00%	23000	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total PCDF	15	15	100.00%	3820	DEQ-SS05-COMP (0-1.5 ft)	0	0	NA	NA
Total PeCDD	15	13	86.67%	204	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
Total PeCDF	15	14	93.33%	51.9	DEQ-SS03-SS03 (0-1.5 ft) Dup	0	0	NA	NA
Total TCDD	15	13	86.67%	110	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
Total TCDF	15	13	86.67%	60.9 J	DEQ-SS01-SS02 (0-1.5 ft)	0	0	NA	NA
Toxicity Equivalency Quotient	3	3	100.00%	9.16 JB	OIL_VAT-3 (0-0.17 ft)	0	0	NA	NA

Notes:
Extended analyte list for "Oil-Vat" prefix samples was limited to Dioxins/Furans and a subset of the SVOCs (see Appendix 3-A-9 through -12)
J - estimated concentration
JB - estimated concentration due to blank contamination
mg/kg - milligrams per kilogram
ng/kg - nanograms per kilogram
SL - Screening Level
SVOC - semi-volatile organic compound
VOC - volatile organic compound

TABLE 3.10-1. FIELD/LABORATORY ANALYSIS, VISUAL SUMMARY, RESIDENTIAL SOIL
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Residential Soil Sampling Field/Lab Analysis	Property Identification																																				
Category	F3P4	F4P1	F5P4	G1P2	G2P3	G4P1	H1P1	H1P2*	H1P3*	H2P3	H3P2	H3P3	H4P1	I1P1	I1P2*	I1P3	I1P4	I1P5	I2P3	I3P1	I3P4	I4P1	I5P1	I5P2	I6P1	J1P1	J3P3	J3P4	J5P1	J5P4	K1P1	K2P4	K3P1	K3P4
Number of XRF Field Screening Results for Lead > 400 ppm	0	0	0	0	0	0	15	1	4	0	0	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Sample Results for Total Lead > 400 mg/kg	0	0	1	0	0	0	7	2	2	0	0	1	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Sample Results for EPH > RBSL	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Sample Results for SVOC > RBSL	0	0	11	0	2	4	0	0	0	0	0	0	10	2	0	0	0	5	0	2	1	0	1	0	1	0	0	0	0	0	0	1	0	0

Residential Soil Sampling Field/Lab Analysis	Property Identification																																				
Category	K3P5	K4P4	K6P4	L1P2	L2P3	L3P4	L6P1	M1P1	M2P2	M5P1	N2P2	N3P3	N4P2	N5P1	N5P2	N6P4	O1P1	O5P2	P1P3	P4P1	P5P2	P5P3*	Q6P1	Q6P2	R4P2	R6P1	R6P2	R6P3	R6P4	S5P1	S6P3	S6P4	STP	T6P2	U1-4
Number of XRF Field Screening Results for Lead > 400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Sample Results for Total Lead > 400 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Sample Results for EPH > RBSL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Sample Results for SVOC > RBSL	1	0	1	0	0	1	0	0	0	6	1	3	0	5	1	11	1	0	0	0	2	1	1	6	2	5	0	0	2	1	1	0	10	0	0

Notes:
ppm - parts per million
mg/kg - milligrams per kilogram
RBSL - risk based screening level
XRF - x-ray fluorescence
EPH - extractable petroleum hydrocarbons
SVOC - semi-volatile organic compounds
EPA - Environmental Protection Agency
* - property sampled in 2010
STP - town of Sunburst soil stockpile

	No Sample Submitted to Lab (see adjacent land parcel)
#	Number of XRF field screening results that exceed the EPA residential screening level of 400 ppm
#	Number of lab results for Total Lead that exceed the EPA residential screening level of 400 mg/kg
#	Number of EPH fraction results above the RBSL
#	Number of SVOC results above the RBSL

TABLE 3.11-1. XRF FIELD DATA VS. LABORATORY RESULTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Total Number of Samples = 1088		
Number of XRF Screenings Below Action Level:	1018	Percent
Corresponding Lab Results Confirmed As Below RBSL:	1005	98.72%
Corresponding Lab Results Above RBSL (False Negatives):	13	1.28%
Number of XRF Screenings Above RBSL:	39	Percent
Corresponding Lab Results Above RBSL:	29	74.36%
Corresponding Lab Results Below RBSL (False Positives):	10	25.64%
Number of XRF Screenings in Buffer Zone (280 ≤ XRF Screening < 400:	31	Percent
Corresponding Lab Results Above RBSL:	14	45.16%
Corresponding Lab Results Below RBSL:	17	54.84%

False Negatives (XRF < 280 ppm , Lab Result ≥ 400 mg/kg)

Sample ID	XRF Field Screening (ppm)	Lab Result (mg/kg)
C-M CONFIRMATION_SW32	51.81	576.00
COOLIDGE-5 (0-0.17 ft)	125.22	849.00
F5P4-SZ01-DP03 (1-1.5 ft)	278.04	451.00
H1P1-C02-DP01 (1-1.5 ft)	29.83	13700.00
H1P1-CF_COMP#01A	79.07	615.00
H1P1-E02-DP01 (1.5-2 ft)	277.46	7550.00
H1P1-E06-DP01 (0.5-1 ft)	178.18	420.00
N6P4-SZ01-DP04 (1-1.5 ft)	108.41	2990.00
TB03-B02-SS01 (0-0.17 ft)	52.67	509.00
TB15-F02-SS01 (0.5-1 ft)	71.79	409.00
TF-F04-SS01 (1.5-2 ft)	ND(14.91)	445.00
TF-Q10-SS01 (0.5-1 ft)	266.13	431.00
TF-Q10-SS01 (1.5-2 ft)	197.99	762.00

False Positives (XRF ≥ 400 ppm , Lab Result < 400 mg/kg)

Sample ID	XRF Field Screening (ppm)	Lab Result (mg/kg)
FE-U06-DP01 (0-0.5 ft)	421.16	396.00
I1-P3-A02 (0-0.5 ft)	641.02	196.00
MILLER-3 (0.5-1 ft)	797.75	221.00
TB03-D04-SS01 (0-0.17 ft)	508.00	399.00
TB04-A04-SS01 (0-0.17 ft)	439.58	311.00
TB30-E03-SS01 (0.5-1 ft)	441.83	49.70
TF-G12-SS01 (0.17-0.5 ft)	2840.10	10.50
TF-M12-SS01 (0.17-0.5 ft)	1200.15	293.00
TF-N12-SS01 (0.17-0.5 ft)	444.07	351.00
TFS2-Q12-SS05 (0.5-1 ft)	1362.52	105.00

Notes:
RBSL - Risk Based Screening Level
mg/kg - milligrams per kilograms
ppm - parts per million
XRF - X-Ray Fluorescence Analyzer

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
GW-1	1385633.93	1695092.88	3471.82	3469.81	3461.81 - 3449.81	3455.31	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
GW-10	1388817.52	1696501.94	3368.71	3366.50	3359.50 - 3346.50	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
GW-11	1388692.39	1696114.34	3375.75	3373.85	3366.85 - 3348.85	N.E.	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
GW-12	1387905.00	1696412.00	3420.23	3417.03	3405.53 - 3382.53	N.E.	N.E.	Clay Overburden	CLOVRB	3.50	No	N/A
GW-13	1388217.00	1695951.00	3400.96	3400.16	3396.16 - 3368.41	3390.16	N.E.	Drift Overburden	DROVRB-WS	1.50	No	N/A
GW-14	1387833.30	1697104.78	3404.93	3405.49	3393.49 - 3370.49	3387.99	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-15	1388544.32	1696608.47	3376.30	3376.83	3369.43 - 3346.83	3356.83	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-16	1388292.55	1696888.07	3383.59	3384.14	3381.14 - 3363.14	3374.14	N.E.	Clay Overburden	CLOVRB-WS	2.00	No	N/A
GW-16R	1388291.20	1696894.35	3383.42	3383.66	3380.66 - 3374.16	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
GW-17	1388796.39	1696908.46	3365.94	3366.66	3359.16 - 3336.66	3349.16	N.E.	Clay Overburden	CLOVRB-WS	2.00	No	N/A
GW-17R	1388791.07	1696899.97	3366.31	3366.14	3361.14 - 3354.14	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
GW-18	1388042.38	1696715.26	3401.54	3402.18	3397.43 - 3373.93	3392.18	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
GW-19	1388184.44	1697067.59	3384.97	3385.69	3382.69 - 3364.99	3375.69	N.E.	Clay Overburden	CLOVRB-WS	1.25	No	N/A
GW-2	1389073.17	1694390.01	3345.59	3343.32	3333.32 - 3315.32	3323.32	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
GW-20	1388424.78	1697180.88	3373.09	3373.62	3370.62 - 3352.87	3361.12	N.E.	Clay Overburden	CLOVRB-WS	2.00	No	N/A
GW-20D	1388424.86	1697210.92	3372.87	3373.27	3358.27 - 3353.27	3358.97	N.E.	Clay Overburden	WS	2.50	No	N/A
GW-20RS	1388425.08	1697200.81	3372.96	3373.27	3368.27 - 3361.27	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
GW-21	1388065.53	1697240.68	3387.39	3388.19	3385.19 - 3362.69	3375.69	N.E.	Clay Overburden	CLOVRB-WS	1.33	No	N/A
GW-22	1388436.94	1697477.26	3370.74	3371.36	3368.56 - 3345.76	3353.86	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-23	1387897.07	1697619.95	3386.27	3387.12	3384.12 - 3361.62	3379.62	N.E.	Clay Overburden	CLOVRB-WS	1.25	No	N/A
GW-24	1388300.23	1697677.24	3372.41	3373.31	3365.81 - 3343.31	3353.81	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-25	1387811.46	1698005.74	3378.95	3379.42	3375.42 - 3353.92	3366.92	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-25R	1387806.67	1698007.16	3379.11	3379.43	3376.43 - 3370.43	N.E.	N.E.	Clay Overburden	CLOVRB	1.50	No	N/A
GW-26	1387630.03	1697724.32	3390.81	3391.39	3385.39 - 3362.89	3381.39	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-27	1387512.25	1697140.54	3417.00	3417.32	3409.32 - 3386.82	3412.32	N.E.	Clay Overburden	WS	UNKNOWN	No	N/A
GW-28	1387432.99	1696570.94	3442.34	3440.88	3422.88 - 3400.38	3423.38	N.E.	Clay Overburden	WS	2.00	No	N/A
GW-29	1387504.10	1697242.61	3413.74	3413.91	3398.91 - 3376.91	3397.91	N.E.	Clay Overburden	CLOVRB-WS	1.75	No	N/A
GW-3	1389218.92	1695161.72	3355.60	3354.25	3328.25 - 3317.25	3325.75	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
GW-30	1388288.66	1697464.86	3375.78	3374.96	3366.96 - 3349.96	N.E.	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
GW-30R	1388277.12	1697464.10	3375.76	3376.06	3373.06 - 3367.06	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
GW-31	1388575.60	1696233.96	3381.64	3379.64	3369.14 - 3346.64	3350.64	N.E.	Drift Overburden	DROVRB-WS	1.00	No	N/A
GW-4	1389324.31	1696249.41	3346.31	3344.77	3329.44 - 3317.77	3330.77	N.E.	Clay Overburden	WS	1.00	No	N/A
GW-4R	1389319.36	1696244.63	3347.55	3344.51	3338.01 - 3331.01	3331.01	N.E.	Clay Overburden	CLOVRB	3.50	No	N/A
GW-5R	1388341.18	1696548.80	3389.46	3387.09	3379.59 - 3362.09	3371.09	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
GW-5RR	1388342.55	1696558.50	3390.14	3387.11	3379.61 - 3373.11	3371.11	N.E.	Clay Overburden	CLOVRB	3.00	No	N/A
GW-6R	1388045.85	1697064.97	3392.54	3392.43	3384.93 - 3372.43	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
GW-7	1386399.75	1694788.27	3448.98	3447.40	3435.40 - 3423.40	3424.68	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
GW-9	1389299.03	1689892.97	3346.74	3345.48	3319.48 - 3307.48	N.E.	N.E.	Clay Overburden	CLOVRB	UNKNOWN	No	N/A

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
GW-A	1387822.28	1696044.59	3432.78	3429.79	3377.79 - 3364.79	3412.79	3389.79	Drift Overburden	COMP	3.50	Yes	Dry Well
GW-C-24	1386848.90	1695491.22	3449.91	3446.93	3413.73 - 3401.93	3430.93	3410.93	Drift Overburden	WS-COMP	2.00	No	N/A
GW-C-25	1386488.15	1695866.43	3449.29	3446.01	3415.01 - 3403.01	3432.01	3416.01	Drift Overburden	COMP	4.00	No	N/A
GW-C-29	1386505.29	1696191.95	3451.77	3449.21	3435.21 - 3428.21	3441.81	N.E.	Drift Overburden	WS	1.00	No	N/A
GW-C-45	1386467.75	1696698.15	3446.75	3444.28	3429.28 - 3418.28	3436.28	3394.28	Drift Overburden	WS	3.00	No	N/A
GW-C-46DF	1386887.25	1696414.73	3461.13	3458.19	3345.19 - 3333.19	3451.19	3409.19	Drift Overburden	COMP	4.00	Yes	Dry Well
GW-C-46S	1386884.01	1696410.76	3461.15	3458.40	3441.30 - 3429.40	3451.40	N.E.	Drift Overburden	WS	2.00	No	N/A
GW-C-47DF	1386283.41	1696298.09	3446.39	3443.10	3365.15 - 3353.10	3435.10	3395.10	Drift Overburden	COMP	4.50	Yes	Dry Well
GW-C-47S	1386284.34	1696304.60	3446.23	3443.21	3434.21 - 3423.21	3435.21	N.E.	Drift Overburden	WS	1.50	No	N/A
GW-C-48	1388010.64	1695909.62	3417.15	3413.81	3393.21 - 3381.81	3395.81	3357.81	Drift Overburden	WS	1.50	No	N/A
GW-CD	1387278.51	1696655.97	3455.73	3453.10	3395.10 - 3383.10	3437.60	3397.10	Drift Overburden	COMP	5.00	Yes	Dry Well
GW-CDF	1387277.67	1696648.98	3455.82	3453.37	3350.87 - 3338.37	3437.87	3397.37	Drift Overburden	COMP	5.00	Yes	Dry Well
GW-CS	1387242.04	1696661.26	3452.25	3452.43	3440.43 - 3433.43	3437.43	N.E.	Drift Overburden	DROVRB-WS	3.50	No	N/A
GW-D	1387371.42	1696382.55	3469.07	3465.94	3422.54 - 3410.94	3457.94	3425.94	Drift Overburden	COMP	5.00	Yes	Dry Well
GW-ED	1388193.66	1696329.41	3401.24	3398.62	3342.62 - 3330.62	3386.62	3348.62	Drift Overburden	COMP	3.50	No	N/A
GW-ES	1388199.05	1696336.23	3401.12	3398.35	3390.35 - 3378.35	3387.10	N.E.	Drift Overburden	DROVRB-WS	2.50	No	N/A
GW-FS	1388568.52	1696430.31	3380.30	3377.62	3366.52 - 3360.62	N.E.	N.E.	Clay Overburden	CLOVRB	1.50	No	N/A
GW-GS	1388917.30	1696369.04	3362.93	3363.31	3355.81 - 3349.31	3344.81	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
GW-H	1387435.14	1696021.74	3468.14	3465.22	3441.72 - 3430.22	3453.72	N.E.	Drift Overburden	WS	3.50	No	N/A
GW-K	1387383.00	1695045.99	3453.75	3450.76	3417.66 - 3405.76	3444.76	3394.76	Drift Overburden	WS	5.00	Yes	Dry Well
GW-L	1387507.35	1697304.75	3410.82	3411.15	3388.15 - 3376.15	3396.15	3350.15	Clay Overburden	WS	3.00	No	N/A
GW-MDF	1386305.15	1696544.68	3445.07	3442.46	3339.66 - 3327.46	3434.46	3396.46	Drift Overburden	COMP	4.00	No	N/A
GW-MS	1386300.14	1696550.77	3444.87	3442.30	3431.40 - 3424.30	3434.30	N.E.	Drift Overburden	WS	1.50	No	N/A
GW-ND	1388101.01	1697617.67	3380.49	3380.76	3362.36 - 3355.76	3366.26	3340.76	Clay Overburden	WS	1.00	No	N/A
GW-NS	1388107.84	1697616.93	3380.34	3380.57	3376.57 - 3370.57	N.E.	N.E.	Clay Overburden	CLOVRB	3.00	No	N/A
LSSI-1	1387755.00	1696381.00	3431.37	3430.43	3412.43 - 3400.43	3416.43	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-10	1387348.27	1694949.19	3450.35	3449.05	3444.05 - 3422.05	3430.05	N.E.	Drift Overburden	DROVRB-WS	4.00	No	N/A
LSSI-11	1387545.14	1694876.44	3447.22	3444.95	3438.95 - 3416.95	3435.95	N.E.	Drift Overburden	DROVRB-WS	4.00	No	N/A
LSSI-12	1387777.59	1694865.22	3436.07	3434.48	3428.48 - 3406.48	3415.48	N.E.	Drift Overburden	DROVRB-WS	4.00	No	N/A
LSSI-13	1387984.31	1694973.14	3426.20	3424.48	3417.48 - 3395.48	3410.48	N.E.	Drift Overburden	DROVRB-WS	2.50	No	N/A
LSSI-14	1388093.54	1695155.60	3415.87	3415.20	3407.20 - 3385.20	3400.20	N.E.	Drift Overburden	DROVRB-WS	2.50	No	N/A
LSSI-15	1387078.57	1695371.35	3451.17	3449.24	3441.24 - 3419.24	3435.24	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-16	1387119.56	1695088.93	3447.50	3445.36	3439.06 - 3417.36	3440.36	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-16R	1387117.29	1695095.36	3448.60	3445.52	3427.12 - 3415.52	3440.52	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-17	1387202.21	1694849.72	3451.71	3449.47	3441.47 - 3419.47	3440.47	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-18	1387404.31	1694728.28	3450.42	3449.80	3441.80 - 3419.80	3445.80	N.E.	Drift Overburden	WS	3.50	No	N/A
LSSI-19	1387691.89	1694706.37	3440.75	3438.98	3432.98 - 3410.98	3434.48	N.E.	Drift Overburden	WS	5.00	Yes	Dry Well
LSSI-2	1387719.00	1696166.00	3440.76	3440.02	3422.02 - 3400.02	3429.02	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-20	1388261.49	1695317.47	3400.22	3397.76	3391.76 - 3369.76	3386.26	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-21	1388523.19	1695477.32	3387.46	3384.91	3368.91 - 3346.91	3369.91	N.E.	Drift Overburden	WS	2.00	No	N/A

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
LSSI-22	1388687.91	1695250.84	3381.44	3378.91	3365.91 - 3343.91	3354.41	N.E.	Clay Overburden	CLOVRB-WS	2.00	No	N/A
LSSI-23	1388839.77	1696233.84	3367.76	3367.30	3359.30 - 3347.30	3355.30	N.E.	Drift Overburden	DROVRB-WS	1.00	No	N/A
LSSI-24	1388831.90	1695925.69	3365.60	3364.86	3356.86 - 3344.86	N.E.	N.E.	Clay Overburden	CLOVRB	UNKNOWN	No	N/A
LSSI-25	1388829.57	1695591.77	3367.68	3367.02	3359.02 - 3337.02	3342.02	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
LSSI-26	1386874.08	1695346.15	3447.08	3446.31	3438.31 - 3416.31	3426.31	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-27	1387243.64	1695629.16	3458.94	3458.36	3445.36 - 3423.36	3449.36	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-28	1387097.00	1695710.00	3458.64	3457.16	3439.16 - 3417.16	3448.16	N.E.	Drift Overburden	WS	2.00	No	N/A
LSSI-29	1386867.00	1695799.00	3453.93	3453.39	3440.39 - 3418.39	3439.39	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
LSSI-3	1387624.00	1695965.00	3450.79	3449.96	3431.96 - 3409.96	3439.96	N.E.	Drift Overburden	WS	5.00	No	N/A
LSSI-30	1387078.00	1695948.00	3465.21	3464.47	3451.47 - 3429.47	3455.47	N.E.	Drift Overburden	WS	4.00	No	N/A
LSSI-31	1386829.27	1696013.95	3455.60	3454.71	3441.71 - 3419.71	3445.71	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-32	1386656.69	1695813.59	3448.72	3447.83	3435.83 - 3413.83	3433.83	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-33	1386771.19	1695565.62	3446.96	3446.30	3434.30 - 3412.30	3437.30	N.E.	Drift Overburden	WS	2.00	No	N/A
LSSI-34	1386959.08	1695178.95	3443.32	3442.35	3430.35 - 3408.35	3428.35	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
LSSI-35	1387018.14	1695002.07	3445.22	3444.42	3432.42 - 3410.42	3430.42	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-36	1386680.06	1695958.28	3450.91	3449.87	3437.87 - 3415.87	3434.37	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-37	1386485.30	1695811.53	3446.66	3445.37	3433.37 - 3411.37	3431.37	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
LSSI-38	1386643.12	1695658.32	3446.91	3445.61	3433.61 - 3411.61	3430.61	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
LSSI-39	1388659.50	1696226.23	3377.71	3374.95	3362.95 - 3340.95	3352.95	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-4	1387495.02	1695776.40	3460.95	3459.17	3451.67 - 3429.17	3453.17	N.E.	Drift Overburden	WS	4.00	No	N/A
LSSI-40	1388459.51	1696240.06	3386.76	3384.60	3377.60 - 3350.60	3362.60	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
LSSI-41	1388455.74	1696109.58	3387.63	3386.51	3374.51 - 3352.51	3357.51	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-42	1388341.00	1696251.00	3391.77	3390.60	3383.60 - 3351.60	3366.60	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-43	1388650.97	1695696.87	3378.71	3377.88	3365.88 - 3343.88	3356.88	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-44	1388449.01	1695872.41	3386.21	3384.53	3373.03 - 3351.03	3367.53	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-5	1387384.31	1695574.39	3460.08	3459.00	3444.00 - 3422.00	3444.00	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
LSSI-6	1387317.13	1695317.04	3454.84	3453.95	3443.95 - 3421.95	3438.95	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
LSSI-7	1387432.84	1695101.91	3452.23	3451.05	3437.25 - 3413.05	3440.05	N.E.	Drift Overburden	WS	2.00	No	N/A
LSSI-8	1387229.06	1695365.07	3453.53	3452.35	3445.35 - 3423.35	3431.35	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
LSSI-9	1387290.03	1695154.14	3452.38	3449.65	3440.65 - 3408.65	3435.65	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	Yes	LNAPL Only - No Water
LSSI-9R	1387293.57	1695146.94	3453.09	3450.03	3427.23 - 3415.03	3436.03	N.E.	Drift Overburden	WS	UNKNOWN	Yes	LNAPL Only - No Water
P2RI-10D	1387287.96	1697016.64	3431.55	3432.03	3367.03 - 3360.03	3420.83	3407.53	Drift Overburden	COMP	5.00	Yes	Dry Well
P2RI-10S	1387288.77	1697009.42	3432.00	3432.59	3424.99 - 3417.59	3421.39	N.E.	Drift Overburden	DROVRB-WS	4.50	No	N/A
P2RI-11D	1386131.10	1696568.27	3434.95	3432.38	3380.96 - 3369.88	3416.38	3383.38	Drift Overburden	COMP	5.00	Yes	Dry Well
P2RI-11S	1386132.94	1696577.44	3434.76	3431.86	3420.11 - 3412.53	3416.36	N.E.	Drift Overburden	DROVRB-WS	2.00	No	N/A
P2RI-12	1387960.41	1696702.79	3412.37	3412.87	3407.97 - 3398.87	3402.37	N.E.	Drift Overburden	DROVRB-WS	4.00	No	N/A
P2RI-13	1387968.95	1696477.61	3410.58	3410.97	3406.17 - 3398.97	3401.47	N.E.	Clay Overburden	CLOVRB-WS	5.00	Yes	Dry Well
P2RI-14	1387953.26	1697291.33	3391.18	3391.78	3382.78 - 3374.78	3385.78	N.E.	Clay Overburden	WS	UNKNOWN	No	N/A
P2RI-15	1388048.20	1696333.55	3408.00	3408.56	3405.36 - 3397.56	3400.56	N.E.	Drift Overburden	DROVRB-WS	5.00	Yes	Dry Well

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
P2RI-16D	1388408.51	1696713.89	3381.28	3381.59	3367.09 - 3362.09	3367.09	N.E.	Clay Overburden	WS	1.00	No	N/A
P2RI-16S	1388413.15	1696720.59	3380.68	3381.10	3372.00 - 3363.70	3366.60	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	Yes	P2RI-16D more representative
P2RI-17	1388421.31	1696944.25	3376.47	3376.91	3370.91 - 3362.91	3364.91	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
P2RI-18	1388334.32	1697282.59	3374.96	3374.60	3366.10 - 3357.60	3359.60	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
P2RI-18D	1388323.46	1697280.26	3375.05	3375.48	3361.48 - 3356.48	3360.48	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
P2RI-18SR	1388349.09	1697285.71	3374.19	3374.44	3369.44 - 3362.44	3359.44	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
P2RI-19D	1388800.95	1697163.24	3364.45	3364.75	3344.75 - 3339.75	3346.75	N.E.	Clay Overburden	WS	1.50	No	N/A
P2RI-19S	1388803.61	1697143.15	3364.34	3364.75	3358.75 - 3351.75	3346.75	N.E.	Clay Overburden	CLOVRB	UNKNOWN	No	N/A
P2RI-1D	1388275.94	1694064.88	3393.55	3390.90	3345.90 - 3338.90	3382.90	3346.90	Drift Overburden	COMP	4.33	Yes	Dry Well
P2RI-1S	1388283.16	1694065.29	3393.07	3390.40	3374.90 - 3366.90	3382.40	N.E.	Drift Overburden	WS	3.00	No	N/A
P2RI-2	1387430.05	1694478.34	3450.21	3447.30	3426.30 - 3418.30	3437.30	3397.30	Drift Overburden	WS	5.00	No	N/A
P2RI-20	1388811.41	1697391.96	3361.85	3362.47	3353.07 - 3344.47	3341.97	N.E.	Clay Overburden	CLOVRB	1.50	No	N/A
P2RI-21D	1389181.72	1697564.73	3352.01	3352.39	3325.39 - 3318.39	3328.39	N.E.	Clay Overburden	WS	3.50	No	N/A
P2RI-21S	1389182.22	1697570.66	3352.24	3352.67	3340.67 - 3333.67	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
P2RI-22D	1389254.02	1697233.29	3349.70	3350.19	3302.19 - 3294.19	3328.19	N.E.	Clay Overburden	WS	3.00	No	N/A
P2RI-22S	1389247.74	1697233.58	3349.98	3350.30	3339.30 - 3330.80	3329.30	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-23D	1389237.87	1696654.52	3350.05	3350.66	3329.86 - 3324.86	3330.66	N.E.	Clay Overburden	WS	2.00	No	N/A
P2RI-23S	1389238.01	1696654.56	3350.03	3350.51	3336.11 - 3328.51	3328.51	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
P2RI-24D	1387247.81	1697507.71	3412.43	3412.69	3371.69 - 3359.69	3405.69	3375.69	Clay Overburden	COMP	2.00	No	N/A
P2RI-24S	1387248.24	1697505.88	3412.03	3412.47	3409.47 - 3403.47	3405.47	N.E.	Clay Overburden	CLOVRB-WS	5.00	Yes	Dry Well
P2RI-25D	1388748.72	1696781.44	3368.42	3368.66	3351.16 - 3346.16	3351.96	N.E.	Clay Overburden	WS	1.50	No	N/A
P2RI-25S	1388749.53	1696788.27	3367.95	3368.44	3356.64 - 3348.24	3353.44	N.E.	Clay Overburden	CLOVRB-WS	1.00	Yes	P2RI-25D more representative
P2RI-26D	1388676.95	1696563.29	3374.45	3372.06	3351.06 - 3346.06	3352.06	N.E.	Clay Overburden	WS	1.00	No	N/A
P2RI-26S	1388685.23	1696563.63	3374.05	3371.75	3360.75 - 3354.25	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-27D	1386887.43	1697258.54	3426.32	3426.69	3374.69 - 3362.69	3411.69	3402.69	Drift Overburden	COMP	2.00	No	N/A
P2RI-27DF	1386886.80	1697251.12	3426.44	3426.79	3349.79 - 3327.79	3411.79	3402.79	Drift Overburden	COMP	5.00	Yes	Dry Well
P2RI-27S	1386889.17	1697270.53	3426.15	3426.47	3416.67 - 3410.97	3411.47	N.E.	Drift Overburden	DROVRB-WS	3.00	No	N/A
P2RI-28S	1389352.60	1696491.83	3348.16	3345.07	3340.07 - 3333.07	3332.57	N.E.	Clay Overburden	CLOVRB	5.00	Yes	Dry Well
P2RI-29S	1389394.08	1695860.76	3341.58	3338.71	3328.21 - 3321.21	N.E.	N.E.	Clay Overburden	CLOVRB	UNKNOWN	No	N/A
P2RI-30S	1389375.27	1695442.69	3338.45	3335.36	3330.36 - 3322.36	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
P2RI-31S	1389384.40	1695182.65	3338.91	3335.64	3330.64 - 3323.14	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-32S	1389401.91	1693748.83	3330.96	3327.43	3323.43 - 3317.43	N.E.	N.E.	Clay Overburden	CLOVRB	4.00	Yes	Dry Well
P2RI-33D	1388782.00	1692991.58	3351.01	3347.71	3307.11 - 3301.21	3321.71	N.E.	Clay Overburden	WS	2.00	No	N/A
P2RI-33S	1388778.47	1692987.35	3351.33	3347.79	3333.79 - 3326.79	N.E.	N.E.	Clay Overburden	CLOVRB	4.00	Yes	Dry Well
P2RI-34D	1388058.05	1693173.51	3391.00	3387.81	3352.81 - 3340.81	3367.81	3353.81	Clay Overburden	COMP	2.50	No	N/A
P2RI-34S	1388057.36	1693168.31	3391.17	3387.99	3372.69 - 3365.49	3367.99	N.E.	Clay Overburden	CLOVRB-WS	5.00	Yes	Dry Well
P2RI-35D	1386776.24	1693545.11	3435.12	3432.32	3345.32 - 3329.32	3428.82	3406.32	Drift Overburden	COMP	5.00	Yes	Dry Well
P2RI-35S	1386771.42	1693546.26	3434.87	3432.74	3417.34 - 3410.24	3429.24	N.E.	Drift Overburden	WS	2.00	No	N/A
P2RI-36DF	1385797.29	1693610.88	3455.75	3452.93	3343.03 - 3330.93	3437.93	3416.93	Drift Overburden	COMP	5.00	Yes	Dry Well

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Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
P2RI-36S	1385796.95	1693600.14	3456.08	3453.44	3436.54 - 3429.44	3439.44	N.E.	Drift Overburden	WS	2.00	No	N/A
P2RI-37D	1388968.92	1693728.74	3343.25	3340.29	3303.29 - 3291.29	3312.79	3306.29	Clay Overburden	COMP	2.00	No	N/A
P2RI-37S	1388967.26	1693719.55	3343.48	3340.30	3327.30 - 3316.30	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
P2RI-38S	1387829.60	1693723.12	3409.89	3406.91	3398.91 - 3391.91	3393.41	N.E.	Drift Overburden	DROVRB-WS	5.00	Yes	Dry Well
P2RI-39S	1387360.31	1694132.78	3450.57	3447.88	3439.88 - 3432.88	3435.38	N.E.	Drift Overburden	DROVRB-WS	5.00	Yes	Dry Well
P2RI-3D	1388230.83	1694902.74	3402.91	3400.58	3325.68 - 3318.58	3388.08	3366.58	Drift Overburden	COMP	4.50	No	N/A
P2RI-3S	1388238.99	1694902.93	3402.51	3400.03	3386.03 - 3378.03	3387.53	N.E.	Drift Overburden	WS	4.00	No	N/A
P2RI-40S	1388005.07	1694127.22	3418.20	3415.38	3401.98 - 3396.38	3406.38	N.E.	Drift Overburden	WS	2.00	No	N/A
P2RI-41D	1388352.11	1694393.39	3388.67	3385.97	3328.97 - 3321.47	3361.97	3343.97	Drift Overburden	COMP	2.00	No	N/A
P2RI-41S	1388357.72	1694397.95	3388.58	3385.35	3375.35 - 3368.35	N.E.	N.E.	Drift Overburden	DROVRB	4.67	Yes	Dry Well
P2RI-42S	1386386.60	1694563.20	3450.23	3447.20	3432.70 - 3427.00	3429.70	N.E.	Drift Overburden	DROVRB-WS	UNKNOWN	No	N/A
P2RI-43D	1386761.79	1694844.13	3448.26	3445.19	3392.89 - 3381.19	3418.19	N.E.	Drift Overburden	WS	2.00	Yes	P2RI-43S more representative
P2RI-43S	1386762.41	1694836.02	3448.13	3445.17	3425.17 - 3413.17	3420.17	N.E.	Drift Overburden	DROVRB-WS	2.50	No	N/A
P2RI-44D	1388237.27	1695166.49	3410.71	3407.48	3330.28 - 3313.48	3387.48	3373.48	Clay Overburden	COMP	2.17	No	N/A
P2RI-44S	1388237.20	1695176.86	3409.65	3406.67	3390.67 - 3383.67	3386.67	N.E.	Clay Overburden	CLOVRB-WS	5.00	Yes	Dry Well
P2RI-44SR	1388237.60	1695160.19	3410.85	3407.98	3386.98 - 3377.98	3388.48	N.E.	Clay Overburden	WS	1.00	No	N/A
P2RI-45D	1386297.81	1696118.21	3443.92	3440.95	3413.95 - 3401.95	3434.45	3416.95	Drift Overburden	COMP	3.00	Yes	Water level slowly increasing- hasn't reached equilibrium
P2RI-45E	1386302.72	1696112.76	3443.80	3441.00	3433.00 - 3419.00	3434.00	3415.00	Drift Overburden	WS	1.00	No	N/A
P2RI-45S	1386282.39	1696133.57	3443.58	3440.66	3436.66 - 3424.66	3434.66	N.E.	Drift Overburden	DROVRB-WS	1.50	No	N/A
P2RI-45T	1386322.04	1696127.64	3445.66	3443.46	3432.96 - 3418.46	3434.96	3416.46	Drift Overburden	WS	UNKNOWN	No	N/A
P2RI-46D	1385539.33	1696191.75	3448.92	3445.81	3389.81 - 3377.81	3428.81	3408.81	Drift Overburden	COMP	4.50	Yes	Dry Well
P2RI-46DFL	1385539.09	1696182.95	3448.92	3445.93	3340.03 - 3326.93	3427.93	3408.93	Drift Overburden	COMP	4.00	No	N/A
P2RI-46DFU	1385537.59	1696162.59	3449.44	3446.32	3366.82 - 3352.32	3429.32	3409.32	Drift Overburden	COMP	4.00	No	N/A
P2RI-46S	1385539.26	1696200.29	3448.59	3445.51	3433.61 - 3426.51	3429.51	N.E.	Drift Overburden	DROVRB-WS	3.50	No	N/A
P2RI-47DF	1383720.94	1698213.56	3423.85	3421.14	3336.14 - 3323.14	3400.14	3381.14	Drift Overburden	COMP	4.67	Yes	Dry Well
P2RI-47S	1383720.45	1698208.31	3423.90	3421.14	3404.14 - 3396.14	3400.14	N.E.	Drift Overburden	DROVRB-WS	2.50	No	N/A
P2RI-48S	1389716.70	1694082.43	3325.43	3323.17	3316.17 - 3310.67	N.E.	N.E.	Clay Overburden	CLOVRB	3.00	No	N/A
P2RI-49S	1389645.47	1693196.09	3333.04	3329.87	3322.87 - 3314.37	N.E.	N.E.	Clay Overburden	CLOVRB	3.00	No	N/A
P2RI-4D	1386626.12	1695324.86	3448.52	3445.81	3414.11 - 3406.81	3422.81	3401.81	Drift Overburden	WS	2.00	No	N/A
P2RI-4S	1386632.97	1695325.23	3448.61	3445.74	3428.34 - 3420.74	3421.74	N.E.	Drift Overburden	DROVRB-WS	4.33	Yes	Dry Well
P2RI-5	1386007.11	1696167.48	3442.23	3439.26	3424.26 - 3416.26	3430.26	3412.26	Drift Overburden	WS	1.00	No	N/A
P2RI-50S	1385724.91	1695648.70	3456.90	3453.89	3440.89 - 3429.89	3439.89	N.E.	Drift Overburden	DROVRB-WS	3.00	No	N/A
P2RI-51S	1388817.00	1696719.65	3366.74	3367.20	3363.20 - 3357.20	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
P2RI-52DF	1384425.73	1695824.51	3494.46	3491.83	3368.33 - 3333.83	3482.83	3471.83	Drift Overburden	COMP	4.00	Yes	Dry Well - used to have water due to well development
P2RI-52S	1384425.31	1695814.55	3494.79	3491.90	3483.90 - 3466.90	3482.90	3471.90	Drift Overburden	DROVRB-WS	5.00	Yes	Dry Well - used to have water due to well development
P2RI-53S	1389996.85	1695186.63	3323.80	3320.65	3316.65 - 3305.65	N.E.	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
P2RI-54SL	1390007.42	1694863.77	3323.26	3320.63	3232.63 - 3217.13	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-54SM	1390006.56	1694849.82	3323.23	3320.52	3267.52 - 3251.52	N.E.	N.E.	Clay Overburden	CLOVRB	1.50	No	N/A
P2RI-54SU	1389995.51	1694864.28	3323.29	3320.39	3313.79 - 3303.39	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
P2RI-55DF	1386010.77	1693765.23	3469.02	3465.91	3362.21 - 3325.91	3452.91	3442.91	Drift Overburden	COMP	5.00	Yes	Dry Well
P2RI-55S	1386017.07	1693765.58	3469.00	3465.79	3445.79 - 3430.79	3452.79	3442.79	Drift Overburden	WS-COMP	4.00	Yes	Dry Well
P2RI-56DF	1386872.94	1697629.51	3417.54	3414.49	3358.29 - 3324.49	3409.19	3391.49	Drift Overburden	COMP	2.00	No	N/A
P2RI-56S	1386865.08	1697628.24	3417.59	3414.66	3399.66 - 3392.66	3409.36	N.E.	Drift Overburden	WS	5.00	No	N/A
P2RI-57S	1389347.67	1692972.42	3334.40	3330.83	3326.83 - 3320.83	N.E.	N.E.	Clay Overburden	CLOVRB	3.00	No	N/A
P2RI-58S	1389692.95	1693536.28	3329.68	3326.27	3317.27 - 3310.27	N.E.	N.E.	Clay Overburden	CLOVRB	2.50	No	N/A
P2RI-59S	1389720.47	1693822.76	3327.39	3324.21	3317.21 - 3310.21	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-5S	1386001.06	1696168.06	3442.30	3439.17	3433.17 - 3426.17	3431.17	N.E.	Drift Overburden	DROVRB-WS	4.00	Yes	Dry Well
P2RI-6	1386937.96	1695747.64	3458.18	3455.77	3436.47 - 3428.77	3443.27	N.E.	Drift Overburden	WS	UNKNOWN	No	N/A
P2RI-60S	1390218.93	1695133.65	3322.54	3319.43	3311.33 - 3299.43	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-61S	1390132.12	1695472.73	3323.18	3320.03	3315.03 - 3308.03	N.E.	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
P2RI-62S	1389677.53	1695402.93	3325.22	3322.04	3318.04 - 3312.04	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
P2RI-63S	1390057.21	1694164.88	3324.02	3320.88	3313.88 - 3301.88	N.E.	N.E.	Clay Overburden	CLOVRB	4.00	Yes	Dry Well
P2RI-7	1387268.03	1695740.41	3463.89	3461.15	3440.15 - 3430.15	3453.15	N.E.	Drift Overburden	WS	4.50	Yes	Dry Well
P2RI-8	1387871.40	1695731.41	3429.74	3426.95	3399.95 - 3389.95	3421.95	N.E.	Drift Overburden	WS	5.00	Yes	Dry Well
P2RI-9D	1389227.10	1695742.58	3350.60	3348.34	3302.34 - 3295.34	3323.34	3298.34	Clay Overburden	WS-COMP	3.00	No	N/A
P2RI-9S	1389241.01	1695743.31	3350.38	3348.30	3336.30 - 3327.30	3325.30	N.E.	Clay Overburden	CLOVRB	3.00	No	N/A
PA-1	1389048.90	1695189.06	3363.13	3360.25	3356.25 - 3329.25	3338.25	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PA-2	1388755.53	1694890.71	3365.54	3362.89	3354.89 - 3337.89	3345.89	N.E.	Clay Overburden	CLOVRB-WS	2.00	No	N/A
PA-3	1388756.02	1694554.00	3367.82	3366.50	3360.50 - 3343.50	3347.50	N.E.	Clay Overburden	CLOVRB-WS	4.00	No	N/A
PA-4	1389019.39	1694336.76	3344.79	3342.67	3336.67 - 3319.67	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
PA-5	1389388.58	1694572.27	3328.38	3325.85	3317.85 - 3305.85	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
PA-5R	1389376.68	1694504.34	3327.96	3324.58	3319.58 - 3312.58	N.E.	N.E.	Clay Overburden	CLOVRB	2.00	No	N/A
PA-6	1389396.15	1694919.04	3338.60	3335.83	3332.33 - 3315.83	N.E.	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
PA-7	1388882.38	1695166.62	3367.37	3365.74	3353.74 - 3331.74	3332.74	N.E.	Clay Overburden	CLOVRB-WS	1.00	No	N/A
PA-8	1389214.91	1695213.84	3353.10	3351.40	3339.40 - 3317.40	3322.40	N.E.	Clay Overburden	CLOVRB-WS	2.00	No	N/A
PA-9	1389077.70	1695319.16	3355.50	3354.05	3347.05 - 3330.05	N.E.	N.E.	Clay Overburden	CLOVRB	1.00	No	N/A
PTA1-10	1387952.03	1697393.46	3391.07	3391.07	3384.07 - 3362.07	3382.07	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA1-20	1387959.80	1697375.78	3391.11	3391.11	3385.11 - 3361.11	3383.11	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA1-40	1387945.42	1697352.36	3392.73	3392.73	3385.73 - 3363.73	3380.73	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA1-5	1387941.82	1697389.20	3391.35	3391.35	3384.35 - 3362.35	3381.35	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA1-EXT	1387942.48	1697384.96	3391.00	3391.00	3384.00 - 3362.00	3366.00	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA3-10	1388682.20	1696393.83	3376.60	3376.60	3367.60 - 3342.60	3355.60	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA3-20	1388683.85	1696371.32	3376.65	3376.65	3367.65 - 3342.65	3352.65	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA3-40	1388665.16	1696348.57	3377.16	3377.16	3368.16 - 3343.16	3355.16	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA3-5	1388674.81	1696393.44	3376.72	3376.72	3367.72 - 3342.72	3347.72	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
PTA3-EXT	1388673.75	1696387.59	3376.79	3376.79	3366.79 - 3344.79	3355.79	N.E.	Clay Overburden	CLOVRB-WS	UNKNOWN	No	N/A
SDW-10D	1387664.71	1697505.85	3396.45	3396.88	3358.88 - 3339.88	3392.88	3380.88	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-10S	1387664.71	1697505.85	3396.58	3396.88	3384.88 - 3375.88	3392.88	3380.88	UNKNOWN	WS-COMP	UNKNOWN	Yes	WET well in Town
SDW-11D	1388668.11	1696923.07	3368.72	3368.93	3320.43 - 3308.93	3353.93	3346.93	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-11S	1388668.11	1696923.07	3368.82	3368.93	3357.93 - 3343.93	3353.93	3346.93	UNKNOWN	OVRB-WS	UNKNOWN	Yes	WET well in Town

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
SDW-12D	1387831.30	1697634.63	3387.12	3387.32	3330.32 - 3321.32	3378.32	3365.32	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-12S	1387831.30	1697634.63	3387.21	3387.32	3378.32 - 3371.32	3378.32	3365.32	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-13D	1387795.94	1698014.97	3379.11	3379.03	3316.03 - 3310.03	3373.03	3360.03	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-13S	1387795.94	1698014.97	3379.20	3379.03	3372.03 - 3359.03	3373.03	3360.03	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-14D	1387671.04	1697794.55	3388.07	3388.46	3329.46 - 3308.46	3385.46	3365.46	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-14S	1387671.04	1697794.55	3388.10	3388.46	3380.46 - 3373.46	3385.46	3365.46	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-15D	1387311.91	1697184.78	3423.92	3424.50	3327.50 - 3304.50	3422.50	3411.50	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-15S	1387311.91	1697184.78	3424.15	3424.50	3410.50 - 3398.50	3422.50	3411.50	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-16D	1388166.00	1697275.54	3382.31	3382.41	3328.41 - 3321.41	3373.41	3368.41	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-16S	1388166.00	1697275.54	3382.43	3382.41	3361.41 - 3337.41	3373.41	3368.41	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-17D	1388379.29	1697121.05	3374.33	3374.33	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Yes	WET well in Town
SDW-17S	1388379.29	1697121.05	3374.41	3374.41	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Yes	WET well in Town
SDW-18	1387307.61	1697201.58	3423.31	3423.31	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Yes	WET well in Town
SDW-19D	1385297.70	1694334.04	3487.91	3486.17	3361.17 - 3346.17	3478.17	3471.67	UNKNOWN	COMP	4.00	No	N/A
SDW-19S	1385297.70	1694334.04	3488.25	3486.17	3417.17 - 3416.17	3478.17	3471.67	UNKNOWN	COMP	4.00	No	N/A
SDW-1D	1386392.01	1696833.59	3440.92	3439.53	3393.53 - 3367.53	3433.53	3430.53	UNKNOWN	COMP	UNKNOWN	No	N/A
SDW-1S	1386392.01	1696833.59	3441.56	3439.53	3437.03 - 3426.53	3433.53	3430.53	UNKNOWN	OVRB-WS	5.00	Yes	Dry Well
SDW-20D	1385681.57	1697586.73	3455.33	3453.34	3325.34 - 3303.34	3453.34	3435.34	UNKNOWN	COMP	UNKNOWN	No	N/A
SDW-20S	1385681.57	1697586.73	3455.57	3453.34	3442.34 - 3426.34	3453.34	3435.34	UNKNOWN	WS-COMP	5.00	Yes	Dry Well
SDW-21D	1384608.86	1697384.68	3446.46	3444.06	3335.06 - 3303.06	3444.06	3428.06	UNKNOWN	COMP	UNKNOWN	Yes	Significant water level fluctuations
SDW-21S	1384608.86	1697384.68	3446.61	3444.06	3437.56 - 3422.06	3444.06	3428.06	UNKNOWN	WS-COMP	4.00	No	N/A
SDW-22D	1384665.31	1696378.76	3460.63	3458.59	3332.59 - 3304.59	3433.59	3398.59	UNKNOWN	COMP	4.00	No	N/A
SDW-22S	1384665.31	1696378.76	3460.74	3458.59	3456.59 - 3434.59	3433.59	3398.59	UNKNOWN	OVRB	3.00	No	N/A
SDW-24D	1385176.97	1696378.89	3448.22	3446.25	3348.25 - 3326.25	3431.25	3388.25	UNKNOWN	COMP	UNKNOWN	No	N/A
SDW-24M	1385176.97	1696378.89	3448.32	3446.25	3400.25 - 3386.25	3431.25	3388.25	UNKNOWN	WS-COMP	5.00	Yes	Significant water level fluctuations
SDW-24S	1385176.97	1696378.89	3448.31	3446.25	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	OVRB	4.00	No	N/A
SDW-25D	1385683.65	1696272.63	3442.26	3440.08	3345.08 - 3322.08	3430.08	3411.08	UNKNOWN	COMP	UNKNOWN	No	N/A
SDW-25S	1385683.65	1696272.63	3442.51	3440.08	3433.08 - 3414.08	3430.08	3411.08	UNKNOWN	OVRB-WS	1.00	No	N/A
SDW-26D	1386611.47	1698580.78	3386.66	3384.32	3332.32 - 3304.32	3376.32	3365.32	UNKNOWN	COMP	3.00	No	N/A
SDW-26M	1386611.47	1698580.78	3386.77	3384.32	3358.32 - 3345.32	3376.32	3365.32	UNKNOWN	COMP	3.00	Yes	Same head as SDW-26S
SDW-26S	1386611.47	1698580.78	3386.82	3384.32	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	2.00	No	N/A
SDW-27D	1384626.40	1698740.90	3404.56	3402.14	3332.14 - 3317.14	3392.14	3387.14	UNKNOWN	COMP	4.00	No	N/A
SDW-27S	1384626.40	1698740.90	3404.14	3402.14	3397.14 - 3380.14	3392.14	3387.14	UNKNOWN	OVRB-WS	3.00	No	N/A
SDW-28D	1385575.76	1698714.79	3395.48	3393.11	3317.11 - 3292.11	3384.11	3368.11	UNKNOWN	COMP	2.00	Yes	Significant water level fluctuations
SDW-28S	1385575.76	1698714.79	3395.65	3393.11	3365.11 - 3341.11	3384.11	3368.11	UNKNOWN	COMP	2.00	No	N/A
SDW-29D	1384024.69	1698080.23	3425.05	3422.45	3350.45 - 3320.45	3415.45	3396.45	UNKNOWN	COMP	5.00	No	N/A
SDW-29S	1384024.69	1698080.23	3425.18	3422.45	3394.45 - 3372.45	3415.45	3396.45	UNKNOWN	COMP	3.00	No	N/A
SDW-2D	1386287.06	1697381.92	3430.35	3428.94	3360.44 - 3338.94	3420.94	3409.94	UNKNOWN	COMP	UNKNOWN	No	N/A
SDW-2S	1386287.06	1697381.92	3430.97	3428.94	3418.44 - 3406.94	3420.94	3409.94	UNKNOWN	WS-COMP	5.00	Yes	Dry Well
SDW-30D	1383875.23	1696963.42	3464.39	3461.83	3370.33 - 3341.83	3455.83	3445.83	UNKNOWN	COMP	4.00	No	N/A
SDW-30S	1383875.23	1696963.42	3464.56	3461.83	3435.83 - 3420.83	3455.83	3445.83	UNKNOWN	COMP	3.00	No	N/A

TABLE 4.1-1. MONITORING WELL INFORMATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Easting (X)	Northing (Y)	Measuring Point Elevation	Ground Surface Elevation	Elevation of Screened Interval (top of sand pack to bottom of screen)	Weathered Shale Elevation	Competent Shale Elevation	Overburden Type	Unit Screened	Production Class	Exclusion from Potentiometric Surface Mapping	Reason for Exclusion
SDW-31	1386340.14	1696909.09	3438.33	3435.93	3348.93 - 3315.93	3429.93	3411.93	UNKNOWN	COMP	UNKNOWN	No	N/A
SDW-3D	1387823.98	1697208.52	3400.48	3400.92	3346.92 - 3337.92	3395.92	3378.92	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-3S	1387823.98	1697208.52	3400.65	3400.92	3383.92 - 3368.92	3395.92	3378.92	UNKNOWN	WS-COMP	UNKNOWN	Yes	WET well in Town
SDW-4D	1386651.18	1697310.73	3427.45	3426.12	3375.12 - 3323.12	3417.12	3405.12	UNKNOWN	COMP	UNKNOWN	Yes	Significant water level fluctuations
SDW-4S	1386651.18	1697310.73	3427.72	3426.12	3413.12 - 3403.12	3417.12	3405.12	UNKNOWN	WS	2.00	No	N/A
SDW-5D	1384879.11	1697218.61	3449.86	3448.68	3352.68 - 3327.68	3420.68	3405.68	UNKNOWN	COMP	UNKNOWN	Yes	Significant water level fluctuations
SDW-6D	1385749.13	1696802.31	3435.54	3434.22	3366.22 - 3322.22	3425.22	3401.22	UNKNOWN	COMP	5.00	Yes	Dry Well
SDW-6S	1385749.13	1696802.31	3435.83	3434.22	3417.22 - 3408.22	3425.22	3401.22	UNKNOWN	WS	2.00	No	N/A
SDW-7D	1387939.97	1696785.93	3416.60	3416.86	3367.86 - 3345.86	3400.86	3383.86	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-7S	1387939.97	1696785.93	3416.67	3416.86	3394.86 - 3384.86	3400.86	3383.86	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-8D	1387866.13	1696999.59	3406.50	3406.68	3353.68 - 3345.68	3406.68	3399.68	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-8S	1387866.13	1696999.59	3406.62	3406.68	3392.68 - 3376.68	3406.68	3399.68	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
SDW-9D	1387702.50	1697219.18	3406.05	3406.50	3347.50 - 3326.50	3398.50	3389.50	UNKNOWN	COMP	UNKNOWN	Yes	WET well in Town
SDW-9S	1387702.50	1697219.18	3406.10	3406.50	3389.50 - 3373.50	3398.50	3389.50	UNKNOWN	WS	UNKNOWN	Yes	WET well in Town
VCP06-RW	1389255.96	1693703.12	3330.84	3327.45	3323.45 - 3307.45	N.E.	N.E.	Clay Overburden	CLOVRB	UNKNOWN	No	N/A

Notes:

P2RI-18SR	location installed as part of the Phase II Remedial Investigation
GW-6R	well plugged and abandoned

CLOVRB - clay overburden, also called alluvial sediments
DROVRB - drift overburden, also called glacial drift
WS - weathered shale
COMP - competent shale
CLOVRB-WS - screened across clay overburden - weathered shale contact
DROVRB-WS - screened across drift overburden - weathered shale contact
OVRB - overburden, undifferentiated
N.E. - not encountered
N/A - not applicable
WET - Water & Environmental Technologies
CEMC - Chevron Environmental Management Company
UNKNOWN - data not available
Elevations given in feet above mean sea level.

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-1S	02/09/10	3393.07	ND	20.72	3372.35	3371.90	26.48
P2RI-1S	04/21/10	3393.07	ND	20.72	3372.35	3371.90	26.28
P2RI-1S	05/17/10	3393.07	ND	20.79	3372.28	3371.90	--
P2RI-1S	06/17/10	3393.07	ND	20.79	3372.28	3371.90	26.48
P2RI-1S	07/19/10	3393.07	ND	20.86	3372.21	3371.90	--
P2RI-1S	08/13/10	3393.07	ND	20.84	3372.23	3371.90	--
P2RI-1S	09/22/10	3393.07	ND	20.75	3372.32	3371.90	--
P2RI-1S	10/19/10	3393.07	ND	20.67	3372.40	3371.90	26.45
P2RI-1S	11/16/10	3393.07	ND	20.77	3372.30	3371.90	26.48
P2RI-1S	03/02/11	3393.07	ND	20.62	3372.45	3371.90	26.45
P2RI-1S	05/24/11	3393.07	ND	20.80	3372.27	3371.90	26.48
P2RI-1S	09/08/11	3393.07	ND	20.68	3372.39	3371.90	26.48
P2RI-1S	11/30/11	3393.07	ND	20.57	3372.50	3371.90	26.47
P2RI-1S	03/15/12	3393.07	ND	20.33	3372.74	3371.90	26.48
P2RI-1S	05/15/12	3393.07	ND	20.46	3372.61	3371.90	26.30
P2RI-1D	02/09/10	3393.55	ND	Dry	Dry	3343.90	52.08
P2RI-1D	04/21/10	3393.55	ND	54.57	3338.98	3343.90	56.10
P2RI-1D	05/17/10	3393.55	ND	54.55	3339.00	3343.90	55.30
P2RI-1D	06/17/10	3393.55	ND	54.70	3338.85	3343.90	55.12
P2RI-1D	07/19/10	3393.55	ND	54.64	3338.91	3343.90	--
P2RI-1D	08/13/10	3393.55	ND	54.56	3338.99	3343.90	--
P2RI-1D	09/22/10	3393.55	ND	54.48	3339.07	3343.90	--
P2RI-1D	10/19/10	3393.55	ND	54.33	3339.22	3343.90	55.85
P2RI-1D	11/16/10	3393.55	ND	54.30	3339.25	3343.90	55.30
P2RI-1D	03/02/11	3393.55	ND	53.99	3339.56	3343.90	55.45
P2RI-1D	05/24/11	3393.55	ND	54.02	3339.53	3343.90	55.31
P2RI-1D	09/08/11	3393.55	ND	54.52	3339.03	3343.90	55.29
P2RI-1D	11/30/11	3393.55	ND	54.65	3338.90	3343.90	55.30
P2RI-1D	03/15/12	3393.55	ND	54.33	3339.22	3343.90	55.29
P2RI-1D	05/15/12	3393.55	ND	54.19	3339.36	3343.90	55.31
P2RI-2	02/09/10	3450.21	ND	32.07	3418.14	3423.30	32.20
P2RI-2	04/21/10	3450.21	ND	31.72	3418.49	3423.30	32.31
P2RI-2	05/17/10	3450.21	ND	31.62	3418.59	3423.30	--
P2RI-2	06/17/10	3450.21	ND	31.45	3418.76	3423.30	32.14
P2RI-2	07/19/10	3450.21	ND	31.46	3418.75	3423.30	--
P2RI-2	08/12/10	3450.21	ND	31.40	3418.81	3423.30	--
P2RI-2	09/21/10	3450.21	ND	31.29	3418.92	3423.30	--
P2RI-2	10/19/10	3450.21	ND	30.41	3419.80	3423.30	32.11
P2RI-2	11/16/10	3450.21	ND	31.51	3418.70	3423.30	32.11
P2RI-2	03/02/11	3450.21	ND	31.20	3419.01	3423.30	32.13
P2RI-2	05/24/11	3450.21	ND	31.50	3418.71	3423.30	32.15
P2RI-2	09/08/11	3450.21	ND	31.22	3418.99	3423.30	32.15
P2RI-2	11/30/11	3450.21	ND	31.03	3419.18	3423.30	32.02
P2RI-2	03/15/12	3450.21	ND	30.82	3419.39	3423.30	32.12
P2RI-2	05/15/12	3450.21	ND	30.76	3419.45	3423.30	32.14

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-3S	02/10/10	3402.51	ND	Dry	Dry	3385.03	23.30
P2RI-3S	04/21/10	3402.51	ND	Dry	Dry	3385.03	23.31
P2RI-3S	05/17/10	3402.51	ND	Dry	Dry	3385.03	--
P2RI-3S	06/16/10	3402.51	ND	Dry	Dry	3385.03	23.31
P2RI-3S	07/19/10	3402.51	ND	Dry	Dry	3385.03	23.30
P2RI-3S	08/13/10	3402.51	ND	Dry	Dry	3385.03	--
P2RI-3S	09/20/10	3402.51	ND	22.89	3379.62	3385.03	23.30
P2RI-3S	10/19/10	3402.51	ND	22.16	3380.35	3385.03	23.30
P2RI-3S	11/16/10	3402.51	ND	22.20	3380.31	3385.03	23.30
P2RI-3S	03/02/11	3402.51	ND	20.15	3382.36	3385.03	23.31
P2RI-3S	05/24/11	3402.51	ND	21.34	3381.17	3385.03	23.32
P2RI-3S	09/08/11	3402.51	ND	16.97	3385.54	3385.03	23.31
P2RI-3S	11/30/11	3402.51	ND	19.33	3383.18	3385.03	23.31
P2RI-3S	03/15/12	3402.51	ND	17.19	3385.32	3385.03	23.31
P2RI-3S	05/15/12	3402.51	ND	16.91	3385.60	3385.03	23.32
P2RI-3D	02/10/10	3402.91	ND	80.44	3322.47	3323.58	86.10
P2RI-3D	04/21/10	3402.91	ND	83.70	3319.21	3323.58	86.53
P2RI-3D	05/17/10	3402.91	ND	83.34	3319.57	3323.58	--
P2RI-3D	06/16/10	3402.91	ND	84.80	3318.11	3323.58	85.18
P2RI-3D	07/19/10	3402.91	ND	84.15	3318.76	3323.58	--
P2RI-3D	08/13/10	3402.91	ND	83.80	3319.11	3323.58	--
P2RI-3D	09/20/10	3402.91	ND	83.33	3319.58	3323.58	86.51
P2RI-3D	10/19/10	3402.91	ND	84.24	3318.67	3323.58	86.65
P2RI-3D	11/16/10	3402.91	ND	84.61	3318.30	3323.58	85.25
P2RI-3D	03/02/11	3402.91	ND	83.65	3319.26	3323.58	85.25
P2RI-3D	05/24/11	3402.91	ND	84.52	3318.39	3323.58	85.25
P2RI-3D	09/08/11	3402.91	ND	83.91	3319.00	3323.58	85.25
P2RI-3D	11/30/11	3402.91	ND	83.55	3319.36	3323.58	85.20
P2RI-3D	03/15/12	3402.91	ND	83.29	3319.62	3323.58	85.28
P2RI-3D	05/15/12	3402.91	ND	83.23	3319.68	3323.58	85.30
P2RI-4S	02/10/10	3448.61	ND	27.84	3420.77	3425.74	28.04
P2RI-4S	04/20/10	3448.61	ND	27.74	3420.87	3425.74	28.10
P2RI-4S	05/17/10	3448.61	ND	27.79	3420.82	3425.74	--
P2RI-4S	06/16/10	3448.61	ND	27.85	3420.76	3425.74	28.12
P2RI-4S	07/19/10	3448.61	ND	27.70	3420.91	3425.74	--
P2RI-4S	08/12/10	3448.61	ND	27.61	3421.00	3425.74	--
P2RI-4S	09/22/10	3448.61	ND	27.62	3420.99	3425.74	--
P2RI-4S	10/19/10	3448.61	ND	27.54	3421.07	3425.74	28.30
P2RI-4S	11/16/10	3448.61	ND	27.60	3421.01	3425.74	28.10
P2RI-4S	03/02/11	3448.61	ND	27.44	3421.17	3425.74	28.11
P2RI-4S	05/25/11	3448.61	ND	27.50	3421.11	3425.74	28.12
P2RI-4S	09/08/11	3448.61	ND	27.39	3421.22	3425.74	28.12
P2RI-4S	11/30/11	3448.61	ND	27.30	3421.31	3425.74	28.11
P2RI-4S	03/15/12	3448.61	ND	27.38	3421.23	3425.74	28.11
P2RI-4S	05/15/12	3448.61	ND	26.60	3422.01	3425.74	28.12

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-4D	02/10/10	3448.52	ND	24.66	3423.86	3411.81	42.23
P2RI-4D	04/20/10	3448.52	ND	24.19	3424.33	3411.81	42.79
P2RI-4D	05/17/10	3448.52	ND	24.23	3424.29	3411.81	42.26
P2RI-4D	06/16/10	3448.52	ND	24.88	3423.64	3411.81	42.24
P2RI-4D	07/19/10	3448.52	ND	24.74	3423.78	3411.81	--
P2RI-4D	08/12/10	3448.52	ND	24.46	3424.06	3411.81	--
P2RI-4D	09/22/10	3448.52	ND	25.36	3423.16	3411.81	--
P2RI-4D	10/19/10	3448.52	ND	24.69	3423.83	3411.81	42.20
P2RI-4D	11/16/10	3448.52	ND	24.63	3423.89	3411.81	42.21
P2RI-4D	03/02/11	3448.52	ND	23.93	3424.59	3411.81	42.03
P2RI-4D	05/25/11	3448.52	ND	24.52	3424.00	3411.81	42.28
P2RI-4D	09/08/11	3448.52	ND	24.70	3423.82	3411.81	42.27
P2RI-4D	11/30/11	3448.52	ND	24.26	3424.26	3411.81	42.26
P2RI-4D	03/15/12	3448.52	ND	23.43	3425.09	3411.81	42.25
P2RI-4D	05/15/12	3448.52	ND	23.79	3424.73	3411.81	42.26
P2RI-5	02/10/10	3442.23	ND	13.22	3429.01	3421.26	26.61
P2RI-5	04/23/10	3442.23	ND	13.68	3428.55	3421.26	26.59
P2RI-5	05/17/10	3442.23	ND	13.69	3428.54	3421.26	--
P2RI-5	06/16/10	3442.23	ND	13.60	3428.63	3421.26	26.62
P2RI-5	07/21/10	3442.23	ND	13.35	3428.88	3421.26	--
P2RI-5	08/13/10	3442.23	ND	12.88	3429.35	3421.26	--
P2RI-5	09/22/10	3442.23	ND	11.93	3430.30	3421.26	--
P2RI-5	10/21/10	3442.23	ND	11.51	3430.72	3421.26	26.56
P2RI-5	03/03/11	3442.23	ND	11.60	3430.63	3421.26	26.52
P2RI-5	05/25/11	3442.23	ND	11.87	3430.36	3421.26	26.57
P2RI-5	09/08/11	3442.23	ND	10.61	3431.62	3421.26	26.62
P2RI-5	11/30/11	3442.23	ND	10.00	3432.23	3421.26	26.52
P2RI-5	03/15/12	3442.23	ND	9.83	3432.40	3421.26	26.59
P2RI-5	05/15/12	3442.23	ND	10.24	3431.99	3421.26	26.63
P2RI-5S	05/25/11	3442.30	ND	14.85	3427.45	3431.17	16.36
P2RI-5S	09/08/11	3442.30	ND	13.54	3428.76	3431.17	16.37
P2RI-5S	12/01/11	3442.30	ND	13.38	3428.92	3431.17	16.36
P2RI-5S	03/15/12	3442.30	ND	12.79	3429.51	3431.17	16.37
P2RI-5S	05/15/12	3442.30	ND	13.86	3428.44	3431.17	16.39
P2RI-6	02/09/10	3458.18	ND	24.22	3433.96	3433.77	30.44
P2RI-6	04/20/10	3458.18	ND	24.37	3433.81	3433.77	30.23
P2RI-6	05/17/10	3458.18	ND	25.20	3432.98	3433.77	30.33
P2RI-6	06/17/10	3458.18	ND	24.78	3433.40	3433.77	30.32
P2RI-6	07/21/10	3458.18	ND	25.01	3433.17	3433.77	--
P2RI-6	08/13/10	3458.18	ND	25.05	3433.13	3433.77	--
P2RI-6	09/22/10	3458.18	ND	24.99	3433.19	3433.77	--
P2RI-6	10/19/10	3458.18	ND	24.96	3433.22	3433.77	30.27
P2RI-6	11/16/10	3458.18	ND	25.09	3433.09	3433.77	30.27
P2RI-6	03/02/11	3458.18	ND	24.86	3433.32	3433.77	30.13
P2RI-6	05/25/11	3458.18	ND	25.39	3432.79	3433.77	30.34
P2RI-6	09/08/11	3458.18	ND	25.30	3432.88	3433.77	30.30
P2RI-6	11/30/11	3458.18	ND	25.12	3433.06	3433.77	30.32
P2RI-6	03/15/12	3458.18	ND	24.62	3433.56	3433.77	30.32
P2RI-6	05/15/12	3458.18	ND	24.93	3433.25	3433.77	30.31

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-7	02/09/10	3463.89	ND	Dry	Dry	3437.15	32.46
P2RI-7	04/20/10	3463.89	ND	32.29	3431.60	3437.15	32.35
P2RI-7	05/17/10	3463.89	ND	32.28	3431.61	3437.15	--
P2RI-7	06/17/10	3463.89	ND	32.28	3431.61	3437.15	32.32
P2RI-7	07/21/10	3463.89	ND	32.26	3431.63	3437.15	--
P2RI-7	08/13/10	3463.89	ND	Dry	Dry	3437.15	32.28
P2RI-7	09/22/10	3463.89	ND	Dry	Dry	3437.15	--
P2RI-7	10/19/10	3463.89	ND	32.26	3431.63	3437.15	32.37
P2RI-7	11/16/10	3463.89	ND	32.26	3431.63	3437.15	32.27
P2RI-7	03/02/11	3463.89	ND	31.68	3432.21	3437.15	32.29
P2RI-7	05/25/11	3463.89	ND	31.57	3432.32	3437.15	32.31
P2RI-7	09/08/11	3463.89	ND	31.59	3432.30	3437.15	32.29
P2RI-7	11/30/11	3463.89	ND	31.58	3432.31	3437.15	32.30
P2RI-7	03/15/12	3463.89	ND	31.54	3432.35	3437.15	32.30
P2RI-7	05/15/12	3463.89	ND	31.75	3432.14	3437.15	32.30
P2RI-8	02/09/10	3429.74	ND	Dry	Dry	3394.95	40.39
P2RI-8	04/20/10	3429.74	ND	Dry	Dry	3394.95	40.14
P2RI-8	05/17/10	3429.74	ND	Dry	Dry	3394.95	40.35
P2RI-8	06/17/10	3429.74	ND	Dry	Dry	3394.95	40.34
P2RI-8	07/21/10	3429.74	ND	Dry	Dry	3394.95	40.31
P2RI-8	08/13/10	3429.74	ND	Dry	Dry	3394.95	--
P2RI-8	09/22/10	3429.74	ND	Dry	Dry	3394.95	--
P2RI-8	10/21/10	3429.74	ND	Dry	Dry	3394.95	40.32
P2RI-8	03/02/11	3429.74	ND	40.14	3389.60	3394.95	40.15
P2RI-8	05/25/11	3429.74	ND	39.90	3389.84	3394.95	40.15
P2RI-8	09/08/11	3429.74	ND	39.72	3390.02	3394.95	40.14
P2RI-8	12/01/11	3429.74	ND	39.89	3389.85	3394.95	40.35
P2RI-8	03/16/12	3429.74	ND	39.78	3389.96	3394.95	40.20
P2RI-8	05/15/12	3429.74	ND	39.75	3389.99	3394.95	40.18
P2RI-9S	02/09/10	3350.38	ND	15.34	3335.04	3334.30	22.32
P2RI-9S	04/22/10	3350.38	ND	14.78	3335.60	3334.30	22.31
P2RI-9S	05/18/10	3350.38	ND	14.05	3336.33	3334.30	22.32
P2RI-9S	06/17/10	3350.38	ND	13.43	3336.95	3334.30	22.11
P2RI-9S	07/21/10	3350.38	ND	13.18	3337.20	3334.30	--
P2RI-9S	08/12/10	3350.38	ND	13.46	3336.92	3334.30	--
P2RI-9S	09/21/10	3350.38	ND	13.52	3336.86	3334.30	--
P2RI-9S	10/19/10	3350.38	ND	13.47	3336.91	3334.30	22.28
P2RI-9S	11/18/10	3350.38	ND	13.37	3337.01	3334.30	22.29
P2RI-9S	03/02/11	3350.38	ND	13.31	3337.07	3334.30	22.29
P2RI-9S	05/25/11	3350.38	ND	11.89	3338.49	3334.30	22.31
P2RI-9S	09/07/11	3350.38	ND	13.30	3337.08	3334.30	22.27
P2RI-9S	12/01/11	3350.38	ND	13.01	3337.37	3334.30	22.31
P2RI-9S	03/15/12	3350.38	ND	12.92	3337.46	3334.30	22.29
P2RI-9S	05/15/12	3350.38	ND	12.50	3337.88	3334.30	22.31

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-9D	02/09/10	3350.60	ND	17.51	3333.09	3300.34	55.74
P2RI-9D	04/22/10	3350.60	ND	16.80	3333.80	3300.34	56.45
P2RI-9D	05/18/10	3350.60	ND	16.18	3334.42	3300.34	55.80
P2RI-9D	06/17/10	3350.60	ND	16.09	3334.51	3300.34	55.75
P2RI-9D	07/21/10	3350.60	ND	15.31	3335.29	3300.34	--
P2RI-9D	08/12/10	3350.60	ND	15.41	3335.19	3300.34	--
P2RI-9D	09/21/10	3350.60	ND	15.56	3335.04	3300.34	--
P2RI-9D	10/21/10	3350.60	NA	NA	NA	3300.34	--
P2RI-9D	11/19/10	3350.60	ND	16.29	3334.31	3300.34	52.19
P2RI-9D	03/02/11	3350.60	ND	15.66	3334.94	3300.34	52.16
P2RI-9D	05/25/11	3350.60	ND	14.74	3335.86	3300.34	54.39
P2RI-9D	09/07/11	3350.60	ND	15.48	3335.12	3300.34	52.91
P2RI-9D	12/01/11	3350.60	ND	16.02	3334.58	3300.34	54.38
P2RI-9D	03/15/12	3350.60	ND	16.31	3334.29	3300.34	54.32
P2RI-9D	05/15/12	3350.60	ND	16.13	3334.47	3300.34	54.32
P2RI-10S	02/09/10	3432.00	ND	13.70	3418.30	3422.59	14.76
P2RI-10S	04/22/10	3432.00	ND	11.98	3420.02	3422.59	14.52
P2RI-10S	05/19/10	3432.00	ND	11.09	3420.91	3422.59	14.72
P2RI-10S	06/17/10	3432.00	ND	13.83	3418.17	3422.59	14.72
P2RI-10S	07/22/10	3432.00	ND	13.62	3418.38	3422.59	--
P2RI-10S	08/12/10	3432.00	ND	12.62	3419.38	3422.59	--
P2RI-10S	09/20/10	3432.00	ND	11.43	3420.57	3422.59	--
P2RI-10S	10/20/10	3432.00	ND	12.84	3419.16	3422.59	14.73
P2RI-10S	11/19/10	3432.00	ND	13.55	3418.45	3422.59	14.70
P2RI-10S	02/28/11	3432.00	ND	13.22	3418.78	3422.59	14.70
P2RI-10S	05/24/11	3432.00	ND	13.44	3418.56	3422.59	14.71
P2RI-10S	09/07/11	3432.00	ND	13.86	3418.14	3422.59	14.70
P2RI-10S	11/30/11	3432.00	ND	14.05	3417.95	3422.59	14.72
P2RI-10S	03/15/12	3432.00	ND	14.24	3417.76	3422.59	14.74
P2RI-10S	05/15/12	3432.00	ND	14.11	3417.89	3422.59	14.72
P2RI-10D	02/09/10	3431.55	ND	Dry	Dry	3365.03	73.56
P2RI-10D	04/22/10	3431.55	ND	Dry	Dry	3365.03	72.47
P2RI-10D	05/19/10	3431.55	ND	Dry	Dry	3365.03	71.71
P2RI-10D	06/17/10	3431.55	ND	Dry	Dry	3365.03	72.85
P2RI-10D	07/22/10	3431.55	ND	Dry	Dry	3365.03	71.65
P2RI-10D	08/12/10	3431.55	ND	Dry	Dry	3365.03	--
P2RI-10D	09/20/10	3431.55	ND	Dry	Dry	3365.03	--
P2RI-10D	10/20/10	3431.55	ND	Dry	Dry	3365.03	73.20
P2RI-10D	11/19/10	3431.55	ND	Dry	Dry	3365.03	71.37
P2RI-10D	02/28/11	3431.55	ND	Dry	Dry	3365.03	71.60
P2RI-10D	05/24/11	3431.55	ND	Dry	Dry	3365.03	71.66
P2RI-10D	09/07/11	3431.55	ND	Dry	Dry	3365.03	71.66
P2RI-10D	11/30/11	3431.55	ND	Dry	Dry	3365.03	71.67
P2RI-10D	03/15/12	3431.55	ND	Dry	Dry	3365.03	71.66
P2RI-10D	05/15/12	3431.55	ND	Dry	Dry	3365.03	71.67

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-11S	02/10/10	3434.76	ND	10.22	3424.54	3417.86	22.48
P2RI-11S	04/24/10	3434.76	ND	10.95	3423.81	3417.86	22.26
P2RI-11S	05/18/10	3434.76	ND	10.96	3423.80	3417.86	--
P2RI-11S	06/17/10	3434.76	ND	11.74	3423.02	3417.86	22.28
P2RI-11S	07/21/10	3434.76	ND	11.30	3423.46	3417.86	--
P2RI-11S	08/16/10	3434.76	ND	11.02	3423.74	3417.86	--
P2RI-11S	09/22/10	3434.76	ND	10.23	3424.53	3417.86	--
P2RI-11S	10/20/10	3434.76	ND	9.89	3424.87	3417.86	22.45
P2RI-11S	11/19/10	3434.76	ND	9.89	3424.87	3417.86	22.40
P2RI-11S	03/03/11	3434.76	ND	9.87	3424.89	3417.86	22.46
P2RI-11S	05/25/11	3434.76	ND	10.75	3424.01	3417.86	22.50
P2RI-11S	09/08/11	3434.76	ND	9.90	3424.86	3417.86	22.30
P2RI-11S	12/01/11	3434.76	ND	8.91	3425.85	3417.86	22.35
P2RI-11S	03/15/12	3434.76	ND	8.86	3425.90	3417.86	22.49
P2RI-11S	05/15/12	3434.76	ND	9.57	3425.19	3417.86	22.51
P2RI-11D	02/10/10	3434.95	ND	Dry	Dry	3378.63	62.13
P2RI-11D	04/24/10	3434.95	ND	Dry	Dry	3378.63	61.68
P2RI-11D	05/18/10	3434.95	ND	Dry	Dry	3378.63	61.73
P2RI-11D	06/17/10	3434.95	ND	Dry	Dry	3378.63	61.59
P2RI-11D	07/21/10	3434.95	ND	Dry	Dry	3378.63	61.66
P2RI-11D	08/16/10	3434.95	ND	Dry	Dry	3378.63	--
P2RI-11D	09/22/10	3434.95	ND	Dry	Dry	3378.63	--
P2RI-11D	10/20/10	3434.95	ND	Dry	Dry	3378.63	62.24
P2RI-11D	11/19/10	3434.95	ND	Dry	Dry	3378.63	62.42
P2RI-11D	03/03/11	3434.95	ND	61.71	3373.24	3378.63	61.72
P2RI-11D	05/25/11	3434.95	ND	61.69	3373.26	3378.63	61.72
P2RI-11D	09/08/11	3434.95	ND	61.67	3373.28	3378.63	61.71
P2RI-11D	12/01/11	3434.95	ND	61.70	3373.25	3378.63	61.72
P2RI-11D	03/15/12	3434.95	ND	61.66	3373.29	3378.63	61.70
P2RI-11D	05/15/12	3434.95	ND	61.63	3373.32	3378.63	61.70
P2RI-12	02/10/10	3412.37	ND	Dry	Dry	3405.87	11.45
P2RI-12	04/22/10	3412.37	ND	Dry	Dry	3405.87	11.42
P2RI-12	05/15/10	3412.37	ND	6.41	3405.96	3405.87	--
P2RI-12	06/17/10	3412.37	ND	7.02	3405.35	3405.87	11.24
P2RI-12	07/22/10	3412.37	ND	7.26	3405.11	3405.87	--
P2RI-12	08/14/10	3412.37	ND	7.78	3404.59	3405.87	--
P2RI-12	09/22/10	3412.37	ND	7.95	3404.42	3405.87	--
P2RI-12	10/20/10	3412.37	ND	8.41	3403.96	3405.87	11.41
P2RI-12	11/18/10	3412.37	ND	8.91	3403.46	3405.87	11.43
P2RI-12	03/03/11	3412.37	NA	NA	NA	3405.87	--
P2RI-12	05/24/11	3412.37	ND	7.10	3405.27	3405.87	11.42
P2RI-12	09/07/11	3412.37	ND	7.81	3404.56	3405.87	11.45
P2RI-12	11/30/11	3412.37	ND	10.90	3401.47	3405.87	11.43
P2RI-12	03/15/12	3412.37	ND	11.09	3401.28	3405.87	11.42
P2RI-12	05/15/12	3412.37	ND	11.10	3401.27	3405.87	11.42

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-13	02/10/10	3410.58	ND	Dry	Dry	3403.97	11.84
P2RI-13	04/22/10	3410.58	ND	Dry	Dry	3403.97	11.62
P2RI-13	05/15/10	3410.58	ND	Dry	Dry	3403.97	--
P2RI-13	06/17/10	3410.58	ND	Dry	Dry	3403.97	11.82
P2RI-13	07/22/10	3410.58	ND	Dry	Dry	3403.97	--
P2RI-13	08/13/10	3410.58	ND	Dry	Dry	3403.97	--
P2RI-13	09/21/10	3410.58	ND	Dry	Dry	3403.97	--
P2RI-13	10/20/10	3410.58	ND	Dry	Dry	3403.97	11.81
P2RI-13	11/18/10	3410.58	ND	Dry	Dry	3403.97	11.80
P2RI-13	03/03/11	3410.58	NA	NA	NA	3403.97	--
P2RI-13	05/24/11	3410.58	ND	11.78	3398.80	3403.97	11.81
P2RI-13	09/09/11	3410.58	ND	11.80	3398.78	3403.97	11.84
P2RI-13	11/30/11	3410.58	ND	11.77	3398.81	3403.97	11.81
P2RI-13	03/15/12	3410.58	ND	11.79	3398.79	3403.97	11.82
P2RI-13	05/15/12	3410.58	ND	11.80	3398.78	3403.97	11.82
P2RI-14	02/09/10	3391.18	ND	13.54	3377.64	3379.78	16.86
P2RI-14	04/22/10	3391.18	ND	16.54	3374.64	3379.78	16.81
P2RI-14	05/15/10	3391.18	ND	16.57	3374.61	3379.78	--
P2RI-14	06/17/10	3391.18	ND	15.53	3375.65	3379.78	16.78
P2RI-14	07/22/10	3391.18	ND	14.42	3376.76	3379.78	--
P2RI-14	08/11/10	3391.18	ND	14.17	3377.01	3379.78	--
P2RI-14	09/21/10	3391.18	ND	13.66	3377.52	3379.78	--
P2RI-14	10/20/10	3391.18	ND	13.80	3377.38	3379.78	16.79
P2RI-14	03/03/11	3391.18	NA	NA	NA	3379.78	--
P2RI-14	11/30/11	3391.18	ND	13.91	3377.27	3379.78	16.78
P2RI-14	03/15/12	3391.18	ND	15.42	3375.76	3379.78	16.77
P2RI-14	05/15/12	3391.18	ND	15.58	3375.60	3379.78	16.73
P2RI-15	02/10/10	3408.00	ND	Dry	Dry	3403.56	9.83
P2RI-15	04/22/10	3408.00	ND	Dry	Dry	3403.56	9.80
P2RI-15	05/15/10	3408.00	ND	Dry	Dry	3403.56	--
P2RI-15	06/17/10	3408.00	ND	Dry	Dry	3403.56	10.81
P2RI-15	07/21/10	3408.00	ND	Dry	Dry	3403.56	10.75
P2RI-15	08/13/10	3408.00	ND	Dry	Dry	3403.56	--
P2RI-15	09/21/10	3408.00	ND	Dry	Dry	3403.56	--
P2RI-15	10/21/10	3408.00	ND	Dry	Dry	3403.56	9.61
P2RI-15	03/03/11	3408.00	ND	Dry	Dry	3403.56	9.58
P2RI-15	05/25/11	3408.00	ND	9.57	3398.43	3403.56	9.62
P2RI-15	09/07/11	3408.00	ND	9.58	3398.42	3403.56	9.82
P2RI-15	12/01/11	3408.00	ND	9.72	3398.28	3403.56	9.83
P2RI-15	03/15/12	3408.00	ND	9.75	3398.25	3403.56	9.82
P2RI-15	05/15/12	3408.00	ND	9.76	3398.24	3403.56	9.83

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-16S	02/10/10	3380.68	ND	8.28	3372.40	3368.70	16.78
P2RI-16S	04/22/10	3380.68	ND	8.39	3372.29	3368.70	16.90
P2RI-16S	05/15/10	3380.68	ND	7.07	3373.61	3368.70	--
P2RI-16S	06/17/10	3380.68	ND	5.88	3374.80	3368.70	16.90
P2RI-16S	07/19/10	3380.68	ND	5.29	3375.39	3368.70	--
P2RI-16S	08/12/10	3380.68	ND	5.25	3375.43	3368.70	--
P2RI-16S	09/21/10	3380.68	ND	5.51	3375.17	3368.70	--
P2RI-16S	10/20/10	3380.68	ND	8.57	3372.11	3368.70	16.57
P2RI-16S	11/18/10	3380.68	ND	13.91	3366.77	3368.70	16.58
P2RI-16S	12/03/10	3380.68	NA	2.52	3378.16	3368.70	--
P2RI-16S	03/01/11	3380.68	ND	5.51	3375.17	3368.70	16.61
P2RI-16S	05/23/11	3380.68	ND	4.58	3376.10	3368.70	16.70
P2RI-16S	09/07/11	3380.68	ND	4.22	3376.46	3368.70	16.70
P2RI-16S	11/30/11	3380.68	ND	5.77	3374.91	3368.70	16.70
P2RI-16S	03/15/12	3380.68	ND	6.61	3374.07	3368.70	16.70
P2RI-16S	05/15/12	3380.68	ND	6.19	3374.49	3368.70	16.70
P2RI-16D	11/17/10	3381.28	ND	2.22	3379.06	3367.09	19.20
P2RI-16D	03/01/11	3381.28	ND	4.05	3377.23	3367.09	19.40
P2RI-16D	05/23/11	3381.28	ND	3.50	3377.78	3367.09	19.64
P2RI-16D	09/07/11	3381.28	ND	2.21	3379.07	3367.09	19.64
P2RI-16D	11/30/11	3381.28	ND	3.55	3377.73	3367.09	19.61
P2RI-16D	03/15/12	3381.28	ND	4.38	3376.90	3367.09	19.67
P2RI-16D	05/15/12	3381.28	ND	4.92	3376.36	3367.09	19.65
P2RI-17	02/10/10	3376.47	ND	8.63	3367.84	3367.91	14.03
P2RI-17	04/22/10	3376.47	ND	13.82	3362.65	3367.91	14.03
P2RI-17	05/15/10	3376.47	ND	6.45	3370.02	3367.91	--
P2RI-17	06/17/10	3376.47	ND	5.82	3370.65	3367.91	13.82
P2RI-17	07/22/10	3376.47	ND	5.59	3370.88	3367.91	--
P2RI-17	08/12/10	3376.47	ND	6.01	3370.46	3367.91	--
P2RI-17	09/20/10	3376.47	ND	6.65	3369.82	3367.91	--
P2RI-17	10/20/10	3376.47	ND	7.11	3369.36	3367.91	13.99
P2RI-17	03/01/11	3376.47	ND	8.34	3368.13	3367.91	13.81
P2RI-17	05/23/11	3376.47	ND	5.22	3371.25	3367.91	14.00
P2RI-17	09/07/11	3376.47	ND	6.54	3369.93	3367.91	13.95
P2RI-17	11/30/11	3376.47	ND	7.42	3369.05	3367.91	14.00
P2RI-17	03/15/12	3376.47	ND	7.61	3368.86	3367.91	13.99
P2RI-17	05/15/12	3376.47	ND	6.27	3370.20	3367.91	14.00
P2RI-18	02/09/10	3374.96	ND	1.73	3373.23	3364.10	14.98
P2RI-18	04/22/10	3374.96	ND	2.02	3372.94	3364.10	14.98
P2RI-18	05/15/10	3374.96	ND	1.34	3373.62	3364.10	--
P2RI-18	06/17/10	3374.96	ND	0.05	3374.91	3364.10	14.94
P2RI-18	07/22/10	3374.96	ND	0.07	3374.89	3364.10	--
P2RI-18	08/11/10	3374.96	ND	0.01	3374.95	3364.10	--
P2RI-18	09/21/10	3374.96	NA	NA	NA	3364.10	--

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-18SR	11/17/10	3374.19	ND	2.94	3371.25	3367.44	11.49
P2RI-18SR	12/03/10	3374.19	NA	3.27	3370.92	3367.44	11.46
P2RI-18SR	02/28/11	3374.19	ND	3.98	3370.21	3367.44	11.49
P2RI-18SR	05/23/11	3374.19	ND	1.71	3372.48	3367.44	11.49
P2RI-18SR	09/07/11	3374.19	ND	3.98	3370.21	3367.44	12.07
P2RI-18SR	11/30/11	3374.19	ND	3.86	3370.33	3367.44	12.17
P2RI-18SR	03/15/12	3374.19	ND	2.94	3371.25	3367.44	12.17
P2RI-18SR	05/15/12	3374.19	ND	2.20	3371.99	3367.44	12.17
P2RI-18D	11/17/10	3375.05	ND	0.01	3375.04	3361.48	18.83
P2RI-18D	12/03/10	3375.05	NA	0.00	3375.05	3361.48	18.71
P2RI-18D	02/28/11	3375.05	NA	NA	NA	3361.48	--
P2RI-18D	05/23/11	3375.05	ND	0.26	3374.79	3361.48	18.67
P2RI-18D	09/07/11	3375.05	ND	0.01	3375.04	3361.48	18.68
P2RI-18D	11/30/11	3375.05	ND	0.00	3375.05	3361.48	18.70
P2RI-18D	03/15/12	3375.05	ND	0.57	3374.48	3361.48	18.74
P2RI-18D	05/15/12	3375.05	ND	0.51	3374.54	3361.48	18.72
P2RI-19S	02/09/10	3364.34	ND	8.38	3355.96	3356.75	12.92
P2RI-19S	04/22/10	3364.34	ND	7.50	3356.84	3356.75	12.88
P2RI-19S	05/18/10	3364.34	ND	5.93	3358.41	3356.75	--
P2RI-19S	06/17/10	3364.34	ND	5.96	3358.38	3356.75	12.88
P2RI-19S	07/21/10	3364.34	ND	6.26	3358.08	3356.75	--
P2RI-19S	08/11/10	3364.34	ND	6.58	3357.76	3356.75	--
P2RI-19S	09/21/10	3364.34	ND	7.03	3357.31	3356.75	--
P2RI-19S	10/20/10	3364.34	ND	7.22	3357.12	3356.75	12.87
P2RI-19S	03/01/11	3364.34	ND	8.00	3356.34	3356.75	12.86
P2RI-19S	05/23/11	3364.34	ND	6.49	3357.85	3356.75	12.70
P2RI-19S	09/07/11	3364.34	ND	7.14	3357.20	3356.75	12.87
P2RI-19S	11/30/11	3364.34	ND	7.93	3356.41	3356.75	12.90
P2RI-19S	03/15/12	3364.34	ND	8.13	3356.21	3356.75	12.90
P2RI-19S	05/15/12	3364.34	ND	7.36	3356.98	3356.75	12.90
P2RI-19D	11/17/10	3364.45	ND	8.36	3356.09	3344.75	24.93
P2RI-19D	03/01/11	3364.45	ND	6.92	3357.53	3344.75	24.89
P2RI-19D	05/23/11	3364.45	ND	5.24	3359.21	3344.75	24.94
P2RI-19D	09/07/11	3364.45	ND	5.16	3359.29	3344.75	24.95
P2RI-19D	11/30/11	3364.45	ND	5.72	3358.73	3344.75	24.98
P2RI-19D	03/15/12	3364.45	ND	6.30	3358.15	3344.75	24.94
P2RI-19D	05/15/12	3364.45	ND	6.03	3358.42	3344.75	24.95

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-20	02/09/10	3361.85	ND	7.36	3354.49	3349.97	17.42
P2RI-20	04/21/10	3361.85	ND	6.43	3355.42	3349.97	17.40
P2RI-20	05/18/10	3361.85	ND	4.80	3357.05	3349.97	--
P2RI-20	06/17/10	3361.85	ND	4.35	3357.50	3349.97	17.40
P2RI-20	07/21/10	3361.85	ND	4.04	3357.81	3349.97	--
P2RI-20	08/11/10	3361.85	ND	4.34	3357.51	3349.97	--
P2RI-20	09/20/10	3361.85	ND	4.66	3357.19	3349.97	17.40
P2RI-20	10/21/10	3361.85	NA	NA	NA	3349.97	--
P2RI-20	11/16/10	3361.85	ND	5.83	3356.02	3349.97	17.21
P2RI-20	03/01/11	3361.85	ND	6.74	3355.11	3349.97	17.37
P2RI-20	05/24/11	3361.85	ND	5.00	3356.85	3349.97	17.38
P2RI-20	09/07/11	3361.85	ND	5.22	3356.63	3349.97	17.38
P2RI-20	11/30/11	3361.85	ND	6.02	3355.83	3349.97	17.40
P2RI-20	03/15/12	3361.85	ND	7.25	3354.60	3349.97	17.40
P2RI-20	05/15/12	3361.85	ND	6.06	3355.79	3349.97	17.40
P2RI-21S	03/01/11	3352.01	ND	8.89	3343.12	3338.67	18.97
P2RI-21S	05/23/11	3352.01	ND	3.20	3348.81	3338.67	18.40
P2RI-21S	09/07/11	3352.24	ND	5.07	3347.17	3338.67	18.20
P2RI-21S	11/30/11	3352.24	ND	5.21	3347.03	3338.67	18.22
P2RI-21S	03/15/12	3352.24	ND	6.02	3346.22	3338.67	18.39
P2RI-21S	05/15/12	3352.24	ND	3.48	3348.76	3338.67	18.38
P2RI-21D	02/09/10	3352.01	ND	29.82	3322.19	3323.39	33.05
P2RI-21D	04/22/10	3352.01	ND	31.28	3320.73	3323.39	34.13
P2RI-21D	05/18/10	3352.01	ND	29.71	3322.30	3323.39	34.32
P2RI-21D	06/17/10	3352.01	ND	33.55	3318.46	3323.39	34.31
P2RI-21D	07/21/10	3352.01	ND	31.95	3320.06	3323.39	--
P2RI-21D	08/14/10	3352.01	ND	30.94	3321.07	3323.39	--
P2RI-21D	09/21/10	3352.01	ND	30.64	3321.37	3323.39	--
P2RI-21D	10/20/10	3352.01	ND	28.29	3323.72	3323.39	34.30
P2RI-21D	11/16/10	3352.01	ND	29.35	3322.66	3323.39	34.27
P2RI-21D	03/01/11	3352.01	ND	31.75	3320.26	3323.39	34.31
P2RI-21D	05/23/11	3352.01	ND	31.55	3320.46	3323.39	34.31
P2RI-21D	09/07/11	3352.01	ND	30.88	3321.13	3323.39	34.31
P2RI-21D	11/30/11	3352.01	ND	32.09	3319.92	3323.39	34.33
P2RI-21D	03/15/12	3352.01	ND	28.86	3323.15	3323.39	34.34
P2RI-21D	05/15/12	3352.01	ND	25.51	3326.50	3323.39	34.34
P2RI-22S	02/09/10	3349.98	ND	10.31	3339.67	3336.30	21.42
P2RI-22S	04/22/10	3349.98	ND	6.68	3343.30	3336.30	19.39
P2RI-22S	05/18/10	3349.98	ND	5.86	3344.12	3336.30	19.41
P2RI-22S	06/17/10	3349.98	ND	4.63	3345.35	3336.30	19.39
P2RI-22S	07/21/10	3349.98	ND	4.12	3345.86	3336.30	--
P2RI-22S	08/11/10	3349.98	ND	4.84	3345.14	3336.30	--
P2RI-22S	09/21/10	3349.98	ND	5.24	3344.74	3336.30	--
P2RI-22S	10/20/10	3349.98	ND	7.68	3342.30	3336.30	19.36
P2RI-22S	11/16/10	3349.98	ND	9.91	3340.07	3336.30	19.22
P2RI-22S	03/01/11	3349.98	ND	10.22	3339.76	3336.30	19.39
P2RI-22S	05/23/11	3349.98	ND	6.55	3343.43	3336.30	19.39
P2RI-22S	09/07/11	3349.98	ND	9.62	3340.36	3336.30	19.39
P2RI-22S	11/30/11	3349.98	ND	10.35	3339.63	3336.30	21.61
P2RI-22S	03/15/12	3349.98	ND	12.25	3337.73	3336.30	19.40
P2RI-22S	05/15/12	3349.98	ND	9.45	3340.53	3336.30	19.40

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-22D	02/09/10	3349.70	ND	43.10	3306.60	3300.19	54.60
P2RI-22D	04/22/10	3349.70	ND	24.27	3325.43	3300.19	55.29
P2RI-22D	05/18/10	3349.70	ND	23.50	3326.20	3300.19	54.60
P2RI-22D	06/17/10	3349.70	ND	50.76	3298.94	3300.19	55.20
P2RI-22D	07/21/10	3349.70	ND	37.06	3312.64	3300.19	--
P2RI-22D	08/11/10	3349.70	ND	29.61	3320.09	3300.19	--
P2RI-22D	09/21/10	3349.70	ND	25.50	3324.20	3300.19	--
P2RI-22D	10/20/10	3349.70	ND	25.71	3323.99	3300.19	54.44
P2RI-22D	11/16/10	3349.70	ND	28.32	3321.38	3300.19	54.53
P2RI-22D	03/01/11	3349.70	ND	20.14	3329.56	3300.19	54.56
P2RI-22D	05/23/11	3349.70	ND	19.46	3330.24	3300.19	54.55
P2RI-22D	09/07/11	3349.70	ND	28.05	3321.65	3300.19	54.52
P2RI-22D	11/30/11	3349.70	ND	25.16	3324.54	3300.19	54.56
P2RI-22D	03/15/12	3349.70	ND	19.87	3329.83	3300.19	54.52
P2RI-22D	05/15/12	3349.70	ND	19.63	3330.07	3300.19	54.52
P2RI-23S	02/09/10	3350.03	ND	20.10	3329.93	3333.51	21.70
P2RI-23S	04/22/10	3350.03	ND	13.03	3337.00	3333.51	21.56
P2RI-23S	05/18/10	3350.03	ND	11.45	3338.58	3333.51	--
P2RI-23S	06/17/10	3350.03	ND	5.83	3344.20	3333.51	21.56
P2RI-23S	07/19/10	3350.03	ND	6.23	3343.80	3333.51	--
P2RI-23S	08/11/10	3350.03	ND	7.23	3342.80	3333.51	--
P2RI-23S	09/21/10	3350.03	ND	7.34	3342.69	3333.51	--
P2RI-23S	03/01/11	3350.03	ND	8.97	3341.06	3333.51	21.61
P2RI-23S	05/23/11	3350.03	ND	6.54	3343.49	3333.51	21.57
P2RI-23S	09/07/11	3350.03	ND	8.85	3341.18	3333.51	21.55
P2RI-23S	11/30/11	3350.03	ND	10.35	3339.68	3333.51	21.61
P2RI-23S	03/15/12	3350.03	ND	9.56	3340.47	3333.51	21.58
P2RI-23S	05/15/12	3350.03	ND	8.12	3341.91	3333.51	21.58
P2RI-23D	11/18/10	3350.05	ND	10.32	3339.73	3329.86	25.24
P2RI-23D	03/01/11	3350.05	ND	11.19	3338.86	3329.86	25.18
P2RI-23D	05/23/11	3350.05	ND	8.85	3341.20	3329.86	25.21
P2RI-23D	09/07/11	3350.05	ND	11.14	3338.91	3329.86	25.20
P2RI-23D	11/30/11	3350.05	ND	12.23	3337.82	3329.86	25.20
P2RI-23D	03/15/12	3350.05	ND	12.88	3337.17	3329.86	25.24
P2RI-23D	05/15/12	3350.05	ND	11.48	3338.57	3329.86	25.22
P2RI-24S	02/09/10	3412.03	ND	Dry	Dry	3408.47	9.27
P2RI-24S	04/22/10	3412.03	ND	Dry	Dry	3408.47	9.23
P2RI-24S	05/19/10	3412.03	ND	Dry	Dry	3408.47	9.24
P2RI-24S	06/17/10	3412.03	ND	Dry	Dry	3408.47	9.20
P2RI-24S	07/22/10	3412.03	ND	Dry	Dry	3408.47	9.23
P2RI-24S	08/12/10	3412.03	ND	Dry	Dry	3408.47	--
P2RI-24S	09/21/10	3412.03	ND	Dry	Dry	3408.47	--
P2RI-24S	10/20/10	3412.03	ND	Dry	Dry	3408.47	9.22
P2RI-24S	03/01/11	3412.03	ND	Dry	Dry	3408.47	9.20
P2RI-24S	05/24/11	3412.03	ND	Dry	Dry	3408.47	9.23
P2RI-24S	09/07/11	3412.03	ND	Dry	Dry	3408.47	9.23
P2RI-24S	11/30/11	3412.03	ND	Dry	Dry	3408.47	9.23
P2RI-24S	03/15/12	3412.03	ND	Dry	Dry	3408.47	9.24
P2RI-24S	05/15/12	3412.03	ND	Dry	Dry	3408.47	9.24

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-24D	11/18/10	3412.43	ND	43.17	3369.26	3369.69	52.68
P2RI-24D	03/01/11	3412.43	ND	36.41	3376.02	3369.69	52.92
P2RI-24D	05/24/11	3412.43	ND	36.90	3375.53	3369.69	52.94
P2RI-24D	09/07/11	3412.43	ND	36.73	3375.70	3369.69	52.92
P2RI-24D	11/30/11	3412.43	ND	36.21	3376.22	3369.69	52.96
P2RI-24D	03/15/12	3412.43	ND	36.18	3376.25	3369.69	52.96
P2RI-24D	05/15/12	3412.43	ND	36.49	3375.94	3369.69	52.92
P2RI-25S	02/09/10	3367.95	ND	8.03	3359.92	3354.44	18.70
P2RI-25S	04/22/10	3367.95	ND	7.92	3360.03	3354.44	18.56
P2RI-25S	05/18/10	3367.95	ND	6.98	3360.97	3354.44	--
P2RI-25S	06/17/10	3367.95	ND	6.34	3361.61	3354.44	18.52
P2RI-25S	07/21/10	3367.95	ND	5.75	3362.20	3354.44	--
P2RI-25S	08/11/10	3367.95	ND	5.63	3362.32	3354.44	--
P2RI-25S	09/21/10	3367.95	ND	5.62	3362.33	3354.44	--
P2RI-25S	10/20/10	3367.95	ND	5.95	3362.00	3354.44	18.64
P2RI-25S	03/01/11	3367.95	ND	7.65	3360.30	3354.44	18.51
P2RI-25S	05/23/11	3367.95	ND	6.12	3361.83	3354.44	18.61
P2RI-25S	09/07/11	3367.95	NA	NA	NA	3354.44	--
P2RI-25S	11/30/11	3367.95	NA	NA	NA	3354.44	--
P2RI-25S	03/15/12	3367.95	NA	NA	NA	3354.44	--
P2RI-25S	05/15/12	3367.95	NA	NA	NA	3354.44	--
P2RI-25D	11/17/10	3368.42	ND	6.10	3362.32	3351.16	21.51
P2RI-25D	03/01/11	3368.42	ND	7.52	3360.90	3351.16	21.50
P2RI-25D	05/23/11	3368.42	ND	6.60	3361.82	3351.16	21.90
P2RI-25D	09/07/11	3368.42	ND	6.12	3362.30	3351.16	17.90
P2RI-25D	11/30/11	3368.42	ND	6.54	3361.88	3351.16	22.10
P2RI-25D	03/15/12	3368.42	ND	7.30	3361.12	3351.16	22.11
P2RI-25D	05/16/12	3368.42	ND	7.01	3361.41	3351.16	22.06
P2RI-26S	11/18/10	3374.05	ND	12.59	3361.46	3359.25	20.10
P2RI-26S	03/01/11	3374.05	ND	13.22	3360.83	3359.25	20.34
P2RI-26S	05/23/11	3374.05	ND	12.17	3361.88	3359.25	20.15
P2RI-26S	09/07/11	3374.05	ND	12.20	3361.85	3359.25	20.18
P2RI-26S	11/30/11	3374.05	ND	12.98	3361.07	3359.25	20.34
P2RI-26S	03/15/12	3374.05	ND	13.12	3360.93	3359.25	20.33
P2RI-26S	05/15/12	3374.05	ND	13.02	3361.03	3359.25	20.33
P2RI-26D	11/18/10	3374.45	ND	13.61	3360.84	3351.06	29.27
P2RI-26D	03/01/11	3374.45	ND	14.70	3359.75	3351.06	29.18
P2RI-26D	05/23/11	3374.45	ND	12.67	3361.78	3351.06	28.67
P2RI-26D	09/07/11	3374.45	ND	12.20	3362.25	3351.06	28.62
P2RI-26D	11/30/11	3374.45	ND	12.77	3361.68	3351.06	28.65
P2RI-26D	03/15/12	3374.45	ND	13.21	3361.24	3351.06	28.70
P2RI-26D	05/15/12	3374.45	ND	13.20	3361.25	3351.06	28.71
P2RI-27S	03/01/11	3426.15	ND	11.63	3414.52	3415.97	13.21
P2RI-27S	05/24/11	3426.15	ND	11.29	3414.86	3415.97	13.92
P2RI-27S	09/07/11	3426.15	ND	11.31	3414.84	3415.97	13.94
P2RI-27S	11/30/11	3426.15	ND	11.85	3414.30	3415.97	13.95
P2RI-27S	03/15/12	3426.15	ND	12.59	3413.56	3415.97	14.11
P2RI-27S	05/15/12	3426.15	ND	13.02	3413.13	3415.97	13.94

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-27D	05/24/11	3426.32	ND	58.26	3368.06	3372.69	63.60
P2RI-27D	09/07/11	3426.32	ND	49.05	3377.27	3372.69	63.60
P2RI-27D	11/30/11	3426.32	ND	48.91	3377.41	3372.69	63.60
P2RI-27D	03/15/12	3426.32	ND	48.69	3377.63	3372.69	63.63
P2RI-27D	05/15/12	3426.32	ND	48.58	3377.74	3372.69	63.60
P2RI-27DF	05/24/11	3426.44	ND	Dry	Dry	3347.79	98.45
P2RI-27DF	09/07/11	3426.44	ND	Dry	Dry	3347.79	98.42
P2RI-27DF	11/30/11	3426.44	ND	Dry	Dry	3347.79	98.51
P2RI-27DF	03/15/12	3426.44	ND	Dry	Dry	3347.79	98.51
P2RI-27DF	05/15/12	3426.44	ND	Dry	Dry	3347.79	98.51
P2RI-28S	12/01/11	3348.16	ND	14.32	3333.84	3338.07	14.85
P2RI-28S	03/15/12	3348.16	ND	14.33	3333.83	3338.07	14.91
P2RI-28S	05/15/12	3348.16	ND	14.40	3333.76	3338.07	14.85
P2RI-29S	12/01/11	3341.58	ND	7.82	3333.76	3326.21	20.31
P2RI-29S	03/15/12	3341.58	ND	7.92	3333.66	3326.21	20.38
P2RI-29S	05/15/12	3341.58	ND	6.53	3335.05	3326.21	20.53
P2RI-30S	12/01/11	3338.45	ND	6.67	3331.78	3327.36	16.08
P2RI-30S	03/15/12	3338.45	ND	6.18	3332.27	3327.36	16.10
P2RI-30S	05/15/12	3338.45	ND	4.70	3333.75	3327.36	16.10
P2RI-31S	12/01/11	3338.91	ND	8.83	3330.08	3328.14	15.27
P2RI-31S	03/15/12	3338.91	ND	8.95	3329.96	3328.14	15.34
P2RI-31S	05/15/12	3338.91	ND	7.97	3330.94	3328.14	15.28
P2RI-32S	12/01/11	3330.96	ND	12.49	3318.47	3322.43	13.14
P2RI-32S	03/15/12	3330.96	ND	12.32	3318.64	3322.43	13.20
P2RI-32S	05/15/12	3330.96	ND	11.79	3319.17	3322.43	13.15
P2RI-33S	11/17/10	3351.33	ND	Dry	Dry	3331.79	25.36
P2RI-33S	03/02/11	3351.33	ND	Dry	Dry	3331.79	25.35
P2RI-33S	05/25/11	3351.33	ND	20.17	3331.16	3331.79	25.37
P2RI-33S	09/08/11	3351.33	ND	21.07	3330.26	3331.79	25.35
P2RI-33S	12/01/11	3351.33	ND	22.93	3328.40	3331.79	25.37
P2RI-33S	03/15/12	3351.33	ND	23.90	3327.43	3331.79	25.35
P2RI-33S	05/15/12	3351.33	ND	24.40	3326.93	3331.79	25.38
P2RI-33D	11/17/10	3351.01	ND	25.96	3325.05	3306.21	50.31
P2RI-33D	03/02/11	3351.01	ND	25.18	3325.83	3306.21	50.00
P2RI-33D	05/25/11	3351.01	ND	25.86	3325.15	3306.21	50.36
P2RI-33D	09/08/11	3351.01	ND	26.28	3324.73	3306.21	50.25
P2RI-33D	12/01/11	3351.01	ND	25.52	3325.49	3306.21	50.17
P2RI-33D	03/15/12	3351.01	ND	25.03	3325.98	3306.21	50.20
P2RI-33D	05/15/12	3351.01	ND	25.34	3325.67	3306.21	50.33
P2RI-34S	10/19/10	3391.17	ND	Dry	Dry	3370.49	26.05
P2RI-34S	11/16/10	3391.17	ND	Dry	Dry	3370.49	26.05
P2RI-34S	03/02/11	3391.17	ND	Dry	Dry	3370.49	26.10
P2RI-34S	05/24/11	3391.17	ND	25.95	3365.22	3370.49	26.06
P2RI-34S	09/08/11	3391.17	ND	25.94	3365.23	3370.49	26.05
P2RI-34S	11/30/11	3391.17	ND	25.95	3365.22	3370.49	26.06
P2RI-34S	03/15/12	3391.17	ND	25.94	3365.23	3370.49	26.05
P2RI-34S	05/15/12	3391.17	ND	25.95	3365.22	3370.49	26.06

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-34D	10/19/10	3391.00	ND	44.03	3346.97	3350.81	51.30
P2RI-34D	11/16/10	3391.00	ND	44.14	3346.86	3350.81	50.60
P2RI-34D	03/02/11	3391.00	ND	44.06	3346.94	3350.81	50.80
P2RI-34D	05/24/11	3391.00	ND	44.35	3346.65	3350.81	50.81
P2RI-34D	09/08/11	3391.00	ND	44.40	3346.60	3350.81	50.79
P2RI-34D	11/30/11	3391.00	ND	44.06	3346.94	3350.81	50.79
P2RI-34D	03/15/12	3391.00	ND	44.28	3346.72	3350.81	50.79
P2RI-34D	05/15/12	3391.00	ND	44.55	3346.45	3350.81	50.80
P2RI-35S	10/19/10	3434.87	ND	18.12	3416.75	3415.24	25.30
P2RI-35S	11/16/10	3434.87	ND	18.04	3416.83	3415.24	25.30
P2RI-35S	03/02/11	3434.87	ND	Dry	Dry	3415.24	25.30
P2RI-35S	05/24/11	3434.87	ND	18.20	3416.67	3415.24	25.30
P2RI-35S	09/08/11	3434.87	ND	17.82	3417.05	3415.24	25.30
P2RI-35S	11/30/11	3434.87	ND	17.03	3417.84	3415.24	25.34
P2RI-35S	03/15/12	3434.87	ND	17.63	3417.24	3415.24	25.29
P2RI-35S	05/15/12	3434.87	ND	18.01	3416.86	3415.24	25.31
P2RI-35D	10/19/10	3435.12	ND	103.15	3331.97	3342.32	105.30
P2RI-35D	11/16/10	3435.12	ND	103.16	3331.96	3342.32	103.24
P2RI-35D	03/02/11	3435.12	ND	Dry	Dry	3342.32	103.31
P2RI-35D	05/24/11	3435.12	ND	103.21	3331.91	3342.32	103.36
P2RI-35D	09/08/11	3435.12	ND	103.17	3331.95	3342.32	103.34
P2RI-35D	11/30/11	3435.12	ND	103.18	3331.94	3342.32	103.34
P2RI-35D	03/15/12	3435.12	ND	103.16	3331.96	3342.32	103.34
P2RI-35D	05/15/12	3435.12	ND	103.20	3331.92	3342.32	103.34
P2RI-36S	10/19/10	3456.08	ND	17.02	3439.06	3434.44	27.25
P2RI-36S	11/16/10	3456.08	ND	15.81	3440.27	3434.44	27.24
P2RI-36S	03/02/11	3456.08	ND	16.29	3439.79	3434.44	27.22
P2RI-36S	05/25/11	3456.08	ND	16.07	3440.01	3434.44	27.27
P2RI-36S	09/08/11	3456.08	ND	15.59	3440.49	3434.44	27.24
P2RI-36S	11/30/11	3456.08	ND	14.99	3441.09	3434.44	27.15
P2RI-36S	03/15/12	3456.08	ND	15.46	3440.62	3434.44	27.24
P2RI-36S	05/15/12	3456.08	ND	15.89	3440.19	3434.44	27.31
P2RI-36DF	11/16/10	3455.75	ND	124.85	3330.90	3340.93	126.40
P2RI-36DF	03/02/11	3455.75	ND	124.59	3331.16	3340.93	124.85
P2RI-36DF	05/25/11	3455.75	ND	Dry	Dry	3340.93	124.88
P2RI-36DF	09/08/11	3455.75	ND	124.74	3331.01	3340.93	124.84
P2RI-36DF	11/30/11	3455.75	ND	Dry	Dry	3340.93	124.80
P2RI-36DF	03/15/12	3455.75	ND	124.66	3331.09	3340.93	124.85
P2RI-36DF	05/15/12	3455.75	ND	124.67	3331.08	3340.93	124.90
P2RI-37S	11/17/10	3343.48	ND	19.60	3323.88	3325.30	23.38
P2RI-37S	03/02/11	3343.48	ND	19.70	3323.78	3325.30	23.38
P2RI-37S	05/25/11	3343.48	ND	19.68	3323.80	3325.30	23.41
P2RI-37S	09/08/11	3343.48	ND	19.27	3324.21	3325.30	23.30
P2RI-37S	12/01/11	3343.48	ND	19.27	3324.21	3325.30	23.40
P2RI-37S	03/15/12	3343.48	ND	19.45	3324.03	3325.30	23.40
P2RI-37S	05/15/12	3343.48	ND	19.56	3323.92	3325.30	23.22
P2RI-37D	12/01/11	3343.25	ND	18.58	3324.67	3301.29	51.78
P2RI-37D	03/15/12	3343.25	ND	18.53	3324.72	3301.29	51.80
P2RI-37D	05/15/12	3343.25	ND	18.87	3324.38	3301.29	48.90

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-38S	10/19/10	3409.89	ND	Dry	Dry	3396.91	17.65
P2RI-38S	11/16/10	3409.89	ND	Dry	Dry	3396.91	17.74
P2RI-38S	03/02/11	3409.89	ND	Dry	Dry	3396.91	17.74
P2RI-38S	05/24/11	3409.89	ND	Dry	Dry	3396.91	17.75
P2RI-38S	09/08/11	3409.89	ND	Dry	Dry	3396.91	17.75
P2RI-38S	11/30/11	3409.89	ND	Dry	Dry	3396.91	17.75
P2RI-38S	03/15/12	3409.89	ND	Dry	Dry	3396.91	17.75
P2RI-38S	05/15/12	3409.89	ND	Dry	Dry	3396.91	17.75
P2RI-39S	11/16/10	3450.57	ND	Dry	Dry	3437.88	18.40
P2RI-39S	03/02/11	3450.57	ND	Dry	Dry	3437.88	18.41
P2RI-39S	05/24/11	3450.57	ND	Dry	Dry	3437.88	18.42
P2RI-39S	09/08/11	3450.57	ND	Dry	Dry	3437.88	18.42
P2RI-39S	11/30/11	3450.57	ND	Dry	Dry	3437.88	18.42
P2RI-39S	03/15/12	3450.57	ND	Dry	Dry	3437.88	18.42
P2RI-39S	05/15/12	3450.57	ND	Dry	Dry	3437.88	18.41
P2RI-40S	03/02/11	3418.20	ND	15.34	3402.86	3401.38	20.44
P2RI-40S	05/24/11	3418.20	ND	14.10	3404.10	3401.38	20.16
P2RI-40S	09/08/11	3418.20	ND	15.46	3402.74	3401.38	21.71
P2RI-40S	11/30/11	3418.20	ND	15.70	3402.50	3401.38	21.72
P2RI-40S	03/15/12	3418.20	ND	15.97	3402.23	3401.38	21.71
P2RI-40S	05/15/12	3418.20	ND	16.12	3402.08	3401.38	21.72
P2RI-41S	10/19/10	3388.58	ND	19.75	3368.83	3373.35	20.35
P2RI-41S	11/16/10	3388.58	ND	19.98	3368.60	3373.35	20.35
P2RI-41S	03/02/11	3388.58	ND	19.70	3368.88	3373.35	20.30
P2RI-41S	05/24/11	3388.58	ND	20.11	3368.47	3373.35	20.36
P2RI-41S	09/08/11	3388.58	ND	20.25	3368.33	3373.35	20.35
P2RI-41S	11/30/11	3388.58	ND	20.25	3368.33	3373.35	20.35
P2RI-41S	03/15/12	3388.58	ND	20.30	3368.28	3373.35	20.35
P2RI-41S	05/15/12	3388.58	ND	20.26	3368.32	3373.35	20.37
P2RI-41D	10/19/10	3388.67	ND	65.05	3323.62	3326.47	67.85
P2RI-41D	11/16/10	3388.67	ND	54.32	3334.35	3326.47	67.34
P2RI-41D	03/02/11	3388.67	ND	54.11	3334.56	3326.47	67.35
P2RI-41D	05/24/11	3388.67	ND	53.97	3334.70	3326.47	67.40
P2RI-41D	09/08/11	3388.67	ND	53.74	3334.93	3326.47	67.39
P2RI-41D	11/30/11	3388.67	ND	53.68	3334.99	3326.47	67.39
P2RI-41D	03/15/12	3388.67	ND	53.68	3334.99	3326.47	67.39
P2RI-41D	05/15/12	3388.67	ND	54.01	3334.66	3326.47	67.22
P2RI-42S	03/04/11	3450.23	ND	19.48	3430.75	3432.00	23.02
P2RI-42S	05/17/11	3450.23	ND	16.02	3434.21	3432.00	--
P2RI-42S	09/18/11	3450.23	ND	16.84	3433.39	3432.00	--
P2RI-42S	12/01/11	3450.23	ND	15.89	3434.34	3432.00	--
P2RI-42S	03/16/12	3450.23	ND	16.31	3433.92	3432.00	--
P2RI-42S	05/15/12	3450.23	ND	17.01	3449.52	3432.00	--
P2RI-43S	10/19/10	3448.13	ND	25.10	3423.03	3423.17	36.32
P2RI-43S	11/16/10	3448.13	ND	25.15	3422.98	3423.17	35.95
P2RI-43S	03/02/11	3448.13	ND	24.18	3423.95	3423.17	35.89
P2RI-43S	05/25/11	3448.13	ND	24.75	3423.38	3423.17	35.89
P2RI-43S	09/08/11	3448.13	ND	25.03	3423.10	3423.17	35.90
P2RI-43S	11/30/11	3448.13	ND	24.65	3423.48	3423.17	35.91
P2RI-43S	03/15/12	3448.13	ND	24.05	3424.08	3423.17	35.90
P2RI-43S	05/15/12	3448.13	ND	24.50	3423.63	3423.17	35.89

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-43D	11/16/10	3448.26	ND	32.10	3416.16	3391.19	69.15
P2RI-43D	03/02/11	3448.26	ND	30.21	3418.05	3391.19	68.05
P2RI-43D	05/25/11	3448.26	ND	30.12	3418.14	3391.19	68.29
P2RI-43D	09/08/11	3448.26	ND	30.75	3417.51	3391.19	68.25
P2RI-43D	11/30/11	3448.26	ND	30.72	3417.54	3391.19	68.84
P2RI-43D	03/15/12	3448.26	ND	30.35	3417.91	3391.19	68.24
P2RI-43D	05/15/12	3448.26	ND	30.10	3418.16	3391.19	68.09
P2RI-44SR	05/24/11	3410.85	ND	29.38	3381.47	3382.98	32.07
P2RI-44SR	09/08/11	3410.85	ND	29.17	3381.68	3382.98	32.06
P2RI-44SR	11/30/11	3410.85	ND	28.98	3381.87	3382.98	31.96
P2RI-44SR	03/15/12	3410.85	ND	28.95	3381.90	3382.98	31.89
P2RI-44SR	05/15/12	3410.85	ND	29.14	3381.71	3382.98	32.04
P2RI-44S	10/19/10	3409.65	ND	Dry	Dry	3388.67	26.50
P2RI-44S	03/02/11	3409.65	ND	Dry	Dry	3388.67	26.34
P2RI-44S	05/24/11	3409.65	ND	Dry	Dry	3388.67	26.52
P2RI-44S	09/08/11	3409.65	ND	26.44	3383.21	3388.67	26.51
P2RI-44S	11/30/11	3409.65	ND	26.45	3383.20	3388.67	26.54
P2RI-44S	03/15/12	3409.65	ND	26.44	3383.21	3388.67	26.51
P2RI-44S	05/15/12	3409.65	ND	26.45	3383.20	3388.67	26.51
P2RI-44D	03/02/11	3410.71	ND	54.21	3356.50	3328.48	95.60
P2RI-44D	05/24/11	3410.71	ND	31.30	3379.41	3328.48	94.27
P2RI-44D	09/08/11	3410.71	ND	62.12	3348.59	3328.48	95.30
P2RI-44D	11/30/11	3410.71	ND	82.13	3328.58	3328.48	95.73
P2RI-44D	03/15/12	3410.71	ND	85.08	3325.63	3328.48	95.29
P2RI-44D	05/15/12	3410.71	ND	84.78	3325.93	3328.48	95.20
P2RI-45S	10/19/10	3443.58	ND	12.60	3430.98	3434.66	19.10
P2RI-45S	11/18/10	3443.58	ND	12.19	3431.39	3434.66	19.12
P2RI-45S	03/03/11	3443.58	ND	12.51	3431.07	3434.66	19.11
P2RI-45S	05/25/11	3443.58	ND	12.56	3431.02	3434.66	19.14
P2RI-45S	09/08/11	3443.58	ND	11.55	3432.03	3434.66	19.13
P2RI-45S	11/30/11	3443.58	ND	10.86	3432.72	3434.66	19.12
P2RI-45S	03/15/12	3443.58	ND	10.68	3432.90	3434.66	19.13
P2RI-45S	05/15/12	3443.58	ND	11.13	3432.45	3434.66	19.14
P2RI-45D	05/25/11	3443.92	ND	35.79	3408.13	3411.95	41.53
P2RI-45D	09/08/11	3443.92	ND	33.35	3410.57	3411.95	41.51
P2RI-45D	11/30/11	3443.92	ND	21.09	3422.83	3411.95	41.51
P2RI-45D	03/15/12	3443.92	ND	16.09	3427.83	3411.95	41.51
P2RI-45D	05/15/12	3443.92	ND	18.14	3425.78	3411.95	41.52
P2RI-45E	05/24/11	3443.80	ND	12.83	3430.97	3431.00	22.77
P2RI-45E	09/08/11	3443.80	11.7	11.77	3432.03	3431.00	--
P2RI-45E	12/01/11	3443.80	ND	11.05	3432.75	3431.00	27.15
P2RI-45E	03/16/12	3443.80	ND	10.68	3433.12	3431.00	--
P2RI-45E	05/15/12	3443.80	ND	11.25	3432.55	3431.00	25.01
P2RI-45T	05/25/11	3445.66	ND	14.82	3430.84	3430.96	27.53
P2RI-45T	09/08/11	3445.66	ND	13.59	3432.07	3430.96	27.53
P2RI-45T	11/30/11	3445.66	ND	12.93	3432.73	3430.96	27.53
P2RI-45T	03/15/12	3445.66	ND	12.69	3432.97	3430.96	27.53
P2RI-45T	05/15/12	3445.66	ND	13.15	3432.51	3430.96	27.54

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-46S	10/19/10	3448.59	ND	16.82	3431.77	3431.51	22.22
P2RI-46S	11/16/10	3448.59	ND	16.22	3432.37	3431.51	22.25
P2RI-46S	03/02/11	3448.59	ND	16.85	3431.74	3431.51	22.27
P2RI-46S	05/25/11	3448.59	ND	17.33	3431.26	3431.51	22.25
P2RI-46S	09/08/11	3448.59	ND	14.88	3433.71	3431.51	22.27
P2RI-46S	11/30/11	3448.59	ND	15.35	3433.24	3431.51	22.26
P2RI-46S	03/15/12	3448.59	ND	15.94	3432.65	3431.51	22.26
P2RI-46S	05/15/12	3448.59	ND	16.16	3432.43	3431.51	22.27
P2RI-46D	11/16/10	3448.92	ND	70.39	3378.53	3387.81	71.70
P2RI-46D	03/02/11	3448.92	ND	69.76	3379.16	3387.81	71.32
P2RI-46D	05/25/11	3448.92	ND	69.84	3379.08	3387.81	71.34
P2RI-46D	09/08/11	3448.92	ND	70.24	3378.68	3387.81	71.32
P2RI-46D	11/30/11	3448.92	ND	70.68	3378.24	3387.81	71.20
P2RI-46D	03/15/12	3448.92	ND	70.79	3378.13	3387.81	71.31
P2RI-46D	05/15/12	3448.92	ND	70.64	3378.28	3387.81	71.35
P2RI-46DFL	10/19/10	3448.92	ND	29.15	3419.77	3336.93	124.21
P2RI-46DFL	03/03/11	3448.92	ND	120.55	3328.37	3336.93	122.82
P2RI-46DFL	05/25/11	3448.92	ND	121.04	3327.88	3336.93	122.87
P2RI-46DFL	09/08/11	3448.92	ND	121.00	3327.92	3336.93	122.82
P2RI-46DFL	11/30/11	3448.92	ND	121.40	3327.52	3336.93	122.84
P2RI-46DFL	03/15/12	3448.92	ND	121.01	3327.91	3336.93	122.82
P2RI-46DFL	05/15/12	3448.92	ND	120.81	3328.11	3336.93	122.65
P2RI-46DFU	10/19/10	3449.44	ND	69.84	3379.60	3362.32	72.61
P2RI-46DFU	05/25/11	3449.44	ND	70.04	3379.40	3362.32	92.00
P2RI-46DFU	09/08/11	3449.44	ND	92.36	3357.08	3362.32	96.67
P2RI-46DFU	11/30/11	3449.44	ND	90.66	3358.78	3362.32	96.59
P2RI-46DFU	03/15/12	3449.44	ND	94.76	3354.68	3362.32	96.69
P2RI-46DFU	05/15/12	3449.44	ND	94.54	3354.90	3362.32	96.53
P2RI-47DF	11/17/10	3423.85	ND	99.74	3324.11	3333.14	100.39
P2RI-47DF	03/03/11	3423.85	ND	99.71	3324.14	3333.14	100.49
P2RI-47DF	06/06/11	3423.85	ND	100.29	3323.56	3333.14	--
P2RI-47DF	09/08/11	3423.85	ND	100.05	3323.80	3333.14	100.45
P2RI-47DF	11/30/11	3423.85	ND	100.21	3323.64	3333.14	100.45
P2RI-47DF	03/15/12	3423.85	ND	100.38	3323.47	3333.14	100.43
P2RI-47DF	05/16/12	3423.85	ND	100.19	3323.66	3333.14	100.44
P2RI-47S	11/17/10	3423.90	ND	25.41	3398.49	3401.14	27.92
P2RI-47S	03/03/11	3423.90	ND	15.98	3407.92	3401.14	27.90
P2RI-47S	06/06/11	3423.90	ND	16.97	3406.93	3401.14	--
P2RI-47S	09/08/11	3423.90	ND	15.25	3408.65	3401.14	27.90
P2RI-47S	11/30/11	3423.90	ND	13.70	3410.20	3401.14	27.93
P2RI-47S	03/15/12	3423.90	ND	13.07	3410.83	3401.14	27.92
P2RI-47S	05/16/12	3423.90	ND	13.44	3410.46	3401.14	27.92
P2RI-48S	11/18/10	3325.43	ND	9.76	3315.67	3315.67	15.36
P2RI-48S	03/02/11	3325.43	ND	5.39	3320.04	3315.67	15.35
P2RI-48S	05/25/11	3325.43	ND	4.32	3321.11	3315.67	15.25
P2RI-48S	09/08/11	3325.43	ND	3.89	3321.54	3315.67	15.18
P2RI-48S	12/01/11	3325.43	ND	5.50	3319.93	3315.67	15.26
P2RI-48S	03/15/12	3325.43	ND	5.93	3319.50	3315.67	15.27
P2RI-48S	05/15/12	3325.43	ND	5.21	3320.22	3315.67	15.26

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-49S	11/18/10	3333.04	ND	10.51	3322.53	3321.87	16.50
P2RI-49S	03/02/11	3333.04	ND	10.89	3322.15	3321.87	16.53
P2RI-49S	05/25/11	3333.04	ND	10.64	3322.40	3321.87	16.31
P2RI-49S	09/08/11	3333.04	ND	10.18	3322.86	3321.87	16.33
P2RI-49S	12/01/11	3333.04	ND	10.37	3322.67	3321.87	16.49
P2RI-49S	03/15/12	3333.04	ND	10.24	3322.80	3321.87	16.49
P2RI-49S	05/15/12	3333.04	ND	10.33	3322.71	3321.87	16.49
P2RI-50S	11/19/10	3456.90	ND	22.54	3434.36	3439.89	27.10
P2RI-50S	03/02/11	3456.90	ND	23.01	3433.89	3439.89	27.36
P2RI-50S	05/25/11	3456.90	ND	23.33	3433.57	3439.89	27.27
P2RI-50S	09/08/11	3456.90	ND	21.51	3435.39	3439.89	27.28
P2RI-50S	11/30/11	3456.90	ND	20.95	3435.95	3439.89	27.25
P2RI-50S	03/15/12	3456.90	ND	20.91	3435.99	3439.89	27.25
P2RI-50S	05/15/12	3456.90	ND	21.61	3435.29	3439.89	27.27
P2RI-51S	03/01/11	3366.74	ND	7.75	3358.99	3362.20	9.82
P2RI-51S	05/25/11	3366.74	ND	5.57	3361.17	3362.20	9.81
P2RI-51S	09/07/11	3366.74	ND	5.59	3361.15	3362.20	9.80
P2RI-51S	11/30/11	3366.74	ND	6.67	3360.07	3362.20	9.66
P2RI-51S	03/15/12	3366.74	ND	6.97	3359.77	3362.20	9.82
P2RI-51S	05/15/12	3366.74	ND	5.56	3361.18	3362.20	9.81
P2RI-52S	06/06/11	3494.79	ND	25.98	3468.81	3481.90	27.36
P2RI-52S	09/08/11	3494.79	ND	26.93	3467.86	3481.90	27.35
P2RI-52S	12/01/11	3494.79	ND	27.00	3467.79	3481.90	27.37
P2RI-52S	03/15/12	3494.79	ND	26.93	3467.86	3481.90	27.37
P2RI-52S	05/16/12	3494.79	ND	27.16	3467.63	3481.90	27.37
P2RI-52DF	06/06/11	3494.46	ND	36.85	3457.61	3363.83	133.08
P2RI-52DF	09/08/11	3494.46	ND	158.74	3335.72	3363.83	161.13
P2RI-52DF	12/01/11	3494.46	ND	159.12	3335.34	3363.83	161.01
P2RI-52DF	03/15/12	3494.46	ND	159.39	3335.07	3363.83	161.21
P2RI-52DF	05/16/12	3494.46	ND	159.87	3334.59	3363.83	161.21
P2RI-53S	09/08/11	3323.80	ND	5.14	3318.66	3315.65	18.12
P2RI-53S	12/01/11	3323.80	ND	6.11	3317.69	3315.65	18.21
P2RI-53S	03/15/12	3323.80	ND	5.76	3318.04	3315.65	18.21
P2RI-53S	05/15/12	3323.80	ND	4.73	3319.07	3315.65	18.20
P2RI-54SU	09/08/11	3323.29	ND	3.95	3319.34	3313.39	19.75
P2RI-54SU	12/01/11	3323.29	ND	5.66	3317.63	3313.39	19.75
P2RI-54SU	03/15/12	3323.29	ND	5.13	3318.16	3313.39	19.75
P2RI-54SU	05/15/12	3323.29	ND	4.08	3319.21	3313.39	19.71
P2RI-54SM	09/08/11	3323.23	ND	0.80	3322.43	3266.52	72.22
P2RI-54SM	12/01/11	3323.23	ND	0.82	3322.41	3266.52	--
P2RI-54SM	03/15/12	3323.23	ND	1.11	3322.12	3266.52	71.91
P2RI-54SM	05/15/12	3323.23	ND	1.02	3322.21	3266.52	72.12
P2RI-54SL	09/08/11	3323.26	ND	0.85	3322.41	3227.13	--
P2RI-54SL	12/01/11	3323.26	ND	0.23	3323.03	3227.13	--
P2RI-54SL	03/15/12	3323.26	ND	0.51	3322.75	3227.13	107.40
P2RI-54SL	05/15/12	3323.26	ND	1.33	3321.93	3227.13	107.80
P2RI-55S	11/30/11	3469.00	ND	34.75	3434.25	3442.79	36.10
P2RI-55S	03/15/12	3469.00	ND	31.83	3437.17	3442.79	36.10
P2RI-55S	05/15/12	3469.00	ND	32.03	3436.97	3442.79	36.11

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
P2RI-55DF	11/30/11	3469.02	ND	142.51	3326.51	3360.91	142.71
P2RI-55DF	03/15/12	3469.02	ND	142.55	3326.47	3360.91	142.68
P2RI-55DF	05/15/12	3469.02	ND	142.58	3326.44	3360.91	142.71
P2RI-56S	11/30/11	3417.59	ND	24.51	3393.08	3397.66	24.72
P2RI-56S	03/15/12	3417.59	ND	24.62	3392.97	3397.66	24.71
P2RI-56S	05/16/12	3417.59	ND	24.61	3392.98	3397.66	24.70
P2RI-56DF	11/30/11	3417.54	ND	89.21	3328.33	3356.49	91.06
P2RI-56DF	03/15/12	3417.54	ND	56.93	3360.61	3356.49	91.10
P2RI-56DF	05/16/12	3417.54	ND	43.01	3374.53	3356.49	91.03
P2RI-57S	12/01/11	3334.40	ND	8.72	3325.68	3325.83	13.15
P2RI-57S	03/15/12	3334.40	ND	9.11	3325.29	3325.83	13.20
P2RI-57S	05/15/12	3334.40	ND	9.31	3325.09	3325.83	13.14
P2RI-58S	12/01/11	3329.68	ND	7.59	3322.09	3315.27	19.09
P2RI-58S	03/15/12	3329.68	ND	8.23	3321.45	3315.27	19.07
P2RI-58S	05/15/12	3329.68	ND	8.33	3321.35	3315.27	19.06
P2RI-59S	12/01/11	3327.39	ND	6.55	3320.84	3315.21	17.10
P2RI-59S	03/15/12	3327.39	ND	7.18	3320.21	3315.21	17.10
P2RI-59S	05/15/12	3327.39	ND	6.96	3320.43	3315.21	17.10
P2RI-60S	12/01/11	3322.54	ND	5.14	3317.40	3309.43	23.10
P2RI-60S	03/15/12	3322.54	ND	4.79	3317.75	3309.43	23.10
P2RI-60S	05/15/12	3322.54	ND	3.80	3318.74	3309.43	23.10
P2RI-61S	12/01/11	3323.18	ND	5.71	3317.47	3313.03	15.09
P2RI-61S	03/15/12	3323.18	ND	5.42	3317.76	3313.03	15.09
P2RI-61S	05/15/12	3323.18	ND	4.35	3318.83	3313.03	15.09
P2RI-62S	12/01/11	3325.22	ND	6.15	3319.07	3317.04	13.03
P2RI-62S	03/15/12	3325.22	ND	4.65	3320.57	3317.04	13.03
P2RI-62S	05/15/12	3325.22	ND	3.92	3321.30	3317.04	13.03
P2RI-63S	12/01/11	3324.02	ND	20.85	3303.17	3311.88	22.21
P2RI-63S	03/15/12	3324.02	ND	19.78	3304.24	3311.88	22.21
P2RI-63S	05/15/12	3324.02	ND	18.20	3305.82	3311.88	22.21
GW-A	11/17/10	3432.78	ND	Dry	Dry	3374.79	68.32
GW-A	03/03/11	3432.78	ND	64.38	3368.40	3374.79	68.19
GW-A	05/23/11	3432.78	ND	63.88	3368.90	3374.79	68.15
GW-A	09/06/11	3432.78	ND	66.26	3366.52	3374.79	68.35
GW-A	11/30/11	3432.78	ND	65.42	3367.36	3374.79	68.20
GW-A	03/15/12	3432.78	ND	64.71	3368.07	3374.79	68.35
GW-A	05/15/12	3432.78	ND	63.51	3369.27	3374.79	68.35
GW-C-24	11/17/10	3449.91	ND	33.91	3416.00	3411.93	48.20
GW-C-24	03/02/11	3449.91	ND	41.05	3408.86	3411.93	48.30
GW-C-24	05/24/11	3449.91	ND	32.11	3417.80	3411.93	48.51
GW-C-24	09/08/11	3449.91	ND	30.90	3419.01	3411.93	48.49
GW-C-24	11/30/11	3449.91	ND	29.29	3420.62	3411.93	48.30
GW-C-24	03/15/12	3449.91	ND	26.29	3423.62	3411.93	48.49
GW-C-24	05/15/12	3449.91	ND	25.79	3424.12	3411.93	48.51

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
GW-C-25	11/17/10	3449.29	ND	Dry	Dry	3413.01	46.55
GW-C-25	03/02/11	3449.29	ND	Dry	Dry	3413.01	46.57
GW-C-25	05/25/11	3449.29	ND	43.03	3406.26	3413.01	46.60
GW-C-25	09/08/11	3449.29	ND	41.34	3407.95	3413.01	46.58
GW-C-25	11/30/11	3449.29	ND	41.73	3407.56	3413.01	46.60
GW-C-25	03/15/12	3449.29	ND	40.40	3408.89	3413.01	46.58
GW-C-25	05/15/12	3449.29	ND	42.32	3406.97	3413.01	46.41
GW-C-29	10/20/10	3451.77	ND	17.09	3434.68	3433.21	24.00
GW-C-29	11/18/10	3451.77	ND	17.34	3434.43	3433.21	23.45
GW-C-29	03/03/11	3451.77	ND	17.94	3433.83	3433.21	23.27
GW-C-29	05/22/11	3451.77	ND	17.58	3434.19	3433.21	--
GW-C-29	09/08/11	3451.77	ND	17.62	3434.15	3433.21	23.60
GW-C-29	12/01/11	3451.77	ND	18.04	3433.73	3433.21	23.60
GW-C-29	03/15/12	3451.77	ND	18.33	3433.44	3433.21	23.60
GW-C-29	05/15/12	3451.77	ND	18.42	3433.35	3433.21	23.37
GW-C-45	11/18/10	3446.75	ND	20.32	3426.43	3428.28	29.00
GW-C-45	03/03/11	3446.75	ND	21.42	3425.33	3428.28	29.02
GW-C-45	05/22/11	3446.75	ND	22.09	3424.66	3428.28	29.02
GW-C-45	09/08/11	3446.75	ND	21.33	3425.42	3428.28	29.04
GW-C-45	12/01/11	3446.75	ND	21.28	3425.47	3428.28	29.00
GW-C-45	03/15/12	3446.75	ND	21.47	3425.28	3428.28	29.01
GW-C-45	05/15/12	3446.75	ND	22.20	3424.55	3428.28	29.03
GW-C-46S	10/20/10	3461.15	ND	23.90	3437.25	3439.40	31.95
GW-C-46S	11/18/10	3461.15	NA	NA	NA	3439.40	--
GW-C-46S	03/01/11	3461.15	ND	24.15	3437.00	3439.40	31.95
GW-C-46S	05/22/11	3461.15	ND	24.26	3436.89	3439.40	--
GW-C-46S	09/07/11	3461.15	ND	24.28	3436.87	3439.40	31.95
GW-C-46S	11/30/11	3461.15	ND	24.02	3437.13	3439.40	31.95
GW-C-46S	03/15/12	3461.15	ND	24.26	3436.89	3439.40	31.96
GW-C-46S	05/15/12	3461.15	ND	24.71	3436.44	3439.40	31.96
GW-C-46DF	11/18/10	3461.13	NA	NA	NA	3343.19	--
GW-C-46DF	03/01/11	3461.13	ND	122.88	3338.25	3343.19	127.62
GW-C-46DF	05/22/11	3461.13	ND	124.90	3336.23	3343.19	124.92
GW-C-46DF	09/07/11	3461.13	ND	127.69	3333.44	3343.19	129.04
GW-C-46DF	11/30/11	3461.13	ND	128.32	3332.81	3343.19	129.08
GW-C-46DF	03/15/12	3461.13	ND	128.43	3332.70	3343.19	129.10
GW-C-46DF	05/15/12	3461.13	ND	128.52	3332.61	3343.19	129.08
GW-C-47S	10/20/10	3446.23	ND	14.17	3432.06	3433.21	23.45
GW-C-47S	11/18/10	3446.23	ND	15.46	3430.77	3433.21	23.36
GW-C-47S	03/03/11	3446.23	ND	16.01	3430.22	3433.21	23.37
GW-C-47S	05/22/11	3446.23	ND	16.08	3430.15	3433.21	--
GW-C-47S	09/08/11	3446.23	14.97	14.98	3431.25	3433.21	23.34
GW-C-47S	12/01/11	3446.23	ND	14.58	3431.65	3433.21	23.50
GW-C-47S	03/15/12	3446.23	ND	14.31	3431.92	3433.21	23.31
GW-C-47S	05/15/12	3446.23	ND	14.72	3431.51	3433.21	--

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
GW-C-47DF	11/18/10	3446.39	ND	85.05	3361.34	3363.10	93.00
GW-C-47DF	03/03/11	3446.39	ND	92.21	3354.18	3363.10	95.05
GW-C-47DF	05/22/11	3446.39	ND	Dry	Dry	3363.10	89.75
GW-C-47DF	09/08/11	3446.39	ND	Dry	Dry	3363.10	89.60
GW-C-47DF	12/01/11	3446.39	ND	89.18	3357.21	3363.10	89.70
GW-C-47DF	03/15/12	3446.39	ND	88.30	3358.09	3363.10	89.52
GW-C-47DF	05/15/12	3446.39	ND	88.35	3358.04	3363.10	89.42
GW-C-48	11/17/10	3417.15	ND	25.14	3392.01	3391.81	35.37
GW-C-48	03/03/11	3417.15	ND	25.28	3391.87	3391.81	35.08
GW-C-48	05/25/11	3417.15	ND	25.72	3391.43	3391.81	35.19
GW-C-48	09/07/11	3417.15	ND	25.28	3391.87	3391.81	35.37
GW-C-48	12/01/11	3417.15	ND	24.90	3392.25	3391.81	35.20
GW-C-48	03/15/12	3417.15	ND	25.22	3391.93	3391.81	35.35
GW-C-48	05/15/12	3417.15	ND	25.77	3391.38	3391.81	35.38
GW-CS	11/19/10	3452.25	ND	Dry	Dry	3438.43	19.13
GW-CS	02/28/11	3452.25	NA	NA	NA	3438.43	--
GW-CS	05/24/11	3452.25	ND	14.24	3438.01	3438.43	19.22
GW-CS	09/07/11	3452.25	ND	15.03	3437.22	3438.43	19.19
GW-CS	11/30/11	3452.25	ND	15.25	3437.00	3438.43	19.21
GW-CS	03/15/12	3452.25	ND	15.76	3436.49	3438.43	19.20
GW-CS	05/15/12	3452.25	ND	15.67	3436.58	3438.43	19.21
GW-CD	11/18/10	3455.73	ND	73.06	3382.67	3393.10	73.17
GW-CD	02/28/11	3455.73	ND	73.08	3382.65	3393.10	73.17
GW-CD	05/24/11	3455.73	ND	72.86	3382.87	3393.10	72.94
GW-CD	09/07/11	3455.73	ND	72.87	3382.86	3393.10	72.93
GW-CD	11/30/11	3455.73	ND	72.13	3383.60	3393.10	72.95
GW-CD	03/15/12	3455.73	ND	72.06	3383.67	3393.10	72.96
GW-CD	05/15/12	3455.73	ND	72.18	3383.55	3393.10	72.94
GW-CDF	11/18/10	3455.82	ND	Dry	Dry	3348.37	117.47
GW-CDF	02/28/11	3455.82	ND	Dry	Dry	3348.37	117.44
GW-CDF	05/24/11	3455.82	ND	Dry	Dry	3348.37	117.45
GW-CDF	09/07/11	3455.82	ND	Dry	Dry	3348.37	117.43
GW-CDF	11/30/11	3455.82	ND	Dry	Dry	3348.37	117.52
GW-CDF	03/15/12	3455.82	ND	Dry	Dry	3348.37	117.55
GW-CDF	05/15/12	3455.82	ND	Dry	Dry	3348.37	117.53
GW-D	11/17/10	3469.07	ND	Dry	Dry	3420.94	64.26
GW-D	03/03/11	3469.07	ND	Dry	Dry	3420.94	58.30
GW-D	05/25/11	3469.07	ND	58.42	3410.65	3420.94	58.48
GW-D	09/07/11	3469.07	ND	58.41	3410.66	3420.94	58.48
GW-D	11/30/11	3469.07	ND	58.42	3410.65	3420.94	58.49
GW-D	03/15/12	3469.07	ND	58.41	3410.66	3420.94	58.49
GW-D	05/15/12	3469.07	ND	58.41	3410.66	3420.94	58.48

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
GW-ES	11/17/10	3401.12	ND	16.30	3384.82	3388.35	22.56
GW-ES	12/04/10	3401.12	NA	16.50	3384.62	3388.35	--
GW-ES	03/03/11	3401.12	ND	17.37	3383.75	3388.35	22.50
GW-ES	05/23/11	3401.12	ND	16.70	3384.42	3388.35	22.56
GW-ES	09/07/11	3401.12	ND	15.29	3385.83	3388.35	22.55
GW-ES	12/01/11	3401.12	ND	16.03	3385.09	3388.35	22.50
GW-ES	03/15/12	3401.12	ND	17.05	3384.07	3388.35	22.55
GW-ES	05/15/12	3401.12	ND	17.31	3383.81	3388.35	22.55
GW-ED	11/17/10	3401.24	ND	63.00	3338.24	3340.62	63.85
GW-ED	12/04/10	3401.24	NA	61.45	3339.79	3340.62	--
GW-ED	03/03/11	3401.24	ND	50.68	3350.56	3340.62	65.69
GW-ED	05/23/11	3401.24	ND	50.70	3350.54	3340.62	65.81
GW-ED	09/07/11	3401.24	ND	46.36	3354.88	3340.62	67.67
GW-ED	12/01/11	3401.24	ND	46.43	3354.81	3340.62	65.95
GW-ED	03/15/12	3401.24	ND	38.17	3363.07	3340.62	67.65
GW-ED	05/15/12	3401.24	ND	36.93	3364.31	3340.62	67.66
GW-FS	11/18/10	3380.30	ND	15.47	3364.83	3365.62	20.11
GW-FS	03/02/11	3380.30	ND	15.74	3364.56	3365.62	20.09
GW-FS	05/25/11	3380.30	ND	14.31	3365.99	3365.62	20.32
GW-FS	09/07/11	3380.30	ND	14.41	3365.89	3365.62	20.30
GW-FS	11/30/11	3380.30	ND	15.14	3365.16	3365.62	20.33
GW-FS	03/15/12	3380.30	ND	15.19	3365.11	3365.62	20.31
GW-FS	05/15/12	3380.30	ND	15.37	3364.93	3365.62	20.31
GW-GS	11/18/10	3362.93	ND	6.02	3356.91	3355.31	13.22
GW-GS	03/02/11	3362.93	ND	6.93	3356.00	3355.31	13.20
GW-GS	05/25/11	3362.93	ND	6.34	3356.59	3355.31	13.32
GW-GS	09/07/11	3362.93	ND	6.13	3356.80	3355.31	13.30
GW-GS	11/30/11	3362.93	ND	6.56	3356.37	3355.31	13.36
GW-GS	03/15/12	3362.93	ND	6.91	3356.02	3355.31	13.15
GW-GS	05/15/12	3362.93	ND	7.06	3355.87	3355.31	13.34
GW-H	03/03/11	3468.14	ND	32.89	3435.25	3440.22	38.10
GW-H	05/25/11	3468.14	ND	32.85	3435.29	3440.22	38.00
GW-H	09/07/11	3468.14	ND	32.84	3435.30	3440.22	38.19
GW-H	11/30/11	3468.14	ND	32.75	3435.39	3440.22	38.19
GW-H	03/15/12	3468.14	ND	32.44	3435.70	3440.22	38.19
GW-H	05/15/12	3468.14	ND	32.79	3435.35	3440.22	38.19
GW-K	10/19/10	3453.75	ND	48.04	3405.71	3415.76	48.70
GW-K	11/18/10	3453.75	ND	48.40	3405.35	3415.76	48.46
GW-K	03/02/11	3453.75	ND	Dry	Dry	3415.76	48.45
GW-K	05/24/11	3453.75	ND	48.36	3405.39	3415.76	48.49
GW-K	09/08/11	3453.75	ND	46.42	3407.33	3415.76	48.45
GW-K	11/30/11	3453.75	ND	46.24	3407.51	3415.76	49.11
GW-K	03/15/12	3453.75	ND	45.96	3407.79	3415.76	48.45
GW-K	05/15/12	3453.75	ND	46.10	3407.65	3415.76	48.50

TABLE 4.1-2. FLUID LEVEL DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Gauged	Measuring Point Elevation (ft-msl)	Depth to Product (ft-bmp)	Depth to Water (ft-bmp)	Water Table Elevation (ft-msl)	Elevation of the Top of the Screen (ft-msl)	Total Well Depth (ft-bmp)
GW-L	05/24/11	3410.82	ND	27.62	3383.20	3386.15	34.19
GW-L	09/07/11	3410.82	ND	27.39	3383.43	3386.15	34.20
GW-L	11/30/11	3410.82	ND	27.18	3383.64	3386.15	34.20
GW-L	03/15/12	3410.82	ND	27.30	3383.52	3386.15	34.20
GW-L	05/15/12	3410.82	ND	27.51	3383.31	3386.15	34.19
GW-MS	10/20/10	3444.87	ND	12.10	3432.77	3429.30	21.11
GW-MS	11/18/10	3444.87	ND	12.05	3432.82	3429.30	21.03
GW-MS	03/03/11	3444.87	ND	13.50	3431.37	3429.30	21.03
GW-MS	05/22/11	3444.87	ND	13.72	3431.15	3429.30	--
GW-MS	09/08/11	3444.87	ND	12.99	3431.88	3429.30	21.03
GW-MS	12/01/11	3444.87	ND	13.64	3431.23	3429.30	21.00
GW-MS	03/15/12	3444.87	ND	14.32	3430.55	3429.30	21.03
GW-MS	05/15/12	3444.87	ND	14.74	3430.13	3429.30	21.05
GW-MDF	11/18/10	3445.07	ND	14.65	3430.42	3337.46	108.40
GW-MDF	03/03/11	3445.07	ND	111.05	3334.02	3337.46	117.91
GW-MDF	05/22/11	3445.07	ND	112.52	3332.55	3337.46	--
GW-MDF	09/08/11	3445.07	ND	116.67	3328.40	3337.46	119.09
GW-MDF	12/01/11	3445.07	ND	117.22	3327.85	3337.46	119.10
GW-MDF	03/15/12	3445.07	ND	117.65	3327.42	3337.46	119.10
GW-MDF	05/15/12	3445.07	ND	117.48	3327.59	3337.46	119.15
GW-NS	03/01/11	3380.34	ND	7.44	3372.90	3375.57	9.10
GW-NS	05/23/11	3380.34	ND	5.76	3374.58	3375.57	9.34
GW-NS	09/07/11	3380.34	ND	7.55	3372.79	3375.57	9.43
GW-NS	11/30/11	3380.34	ND	6.96	3373.38	3375.57	9.50
GW-NS	03/15/12	3380.34	ND	7.58	3372.76	3375.57	9.52
GW-NS	05/15/12	3380.34	ND	5.68	3374.66	3375.57	9.52
GW-ND	03/01/11	3380.49	ND	8.95	3371.54	3360.76	24.73
GW-ND	05/23/11	3380.49	ND	5.60	3374.89	3360.76	24.80
GW-ND	09/07/11	3380.49	ND	5.04	3375.45	3360.76	25.15
GW-ND	11/30/11	3380.49	ND	5.71	3374.78	3360.76	25.15
GW-ND	03/15/12	3380.49	ND	6.72	3373.77	3360.76	25.15
GW-ND	05/15/12	3380.49	ND	6.42	3374.07	3360.76	25.15
PA-5R	12/01/11	3327.96	ND	8.45	3319.51	3317.58	15.31
PA-5R	03/15/12	3327.96	ND	6.93	3321.03	3317.58	15.38
PA-5R	05/15/12	3327.96	ND	5.54	3322.42	3317.58	15.32

Notes:
ft-msl - feet above mean sea level
ft-bmp - feet below measuring point
ND - Not detected
-- - Data not collected
NA - Data not available

TABLE 4.1-3. FIELD PARAMETER DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH (Std Units)	Salinity (%)	Specific Conductance @25°C (umhos/cm)	Temperature (°C)	Total Dissolved Solids (g/L)	Turbidity (NTU)
P2RI-1D	03/11/11	188.0	0.00	6.42	0.50	9750	10.29	6.2	-5 (a)
P2RI-2	03/15/11	-107.0	0.00	6.94	2.30	36600	10.09	22.0	55.5
P2RI-3S	03/15/11	119.0	0.89	6.67	0.20	4000	11.48	2.6	80.7
P2RI-3S	06/08/11	267.0	9.23	6.77	0.20	4350	10.92	2.8	123.0
P2RI-3S	09/13/11	1.2	9.49	6.21	0.20	3960	10.35	2.5	77.5
P2RI-3D	03/15/11	-133.0	0.12	7.43	0.20	3700	9.60	2.3	>1000
P2RI-5	03/15/11	187.0	0.75	5.32	3.40	52700	7.74	32.0	332.0
P2RI-5S	09/19/11	194.0	8.08	6.59	3.40	52000	10.05	32.0	-5 (a)
P2RI-6	06/13/11	174.0	3.61	5.45	3.50	54000	8.88	32.0	56.3
P2RI-7	03/10/11	120.0	0.00	6.80	3.50	54200	12.27	32.0	317.0
P2RI-12	06/23/10	195.5	0.00	8.02	1.82	3483	12.03	2.2	-4.1
P2RI-12	09/22/10	109.0	10.70	7.95	0.50	1000	11.00	6.0	143.0
P2RI-12	10/25/10	146.0	10.48	7.75	0.00	1110	8.60	7.0	258.0
P2RI-12	03/30/11	205.0	0.04	7.04	0.70	1360	7.09	8.0	18.3
P2RI-16D	03/10/11	168.0	0.00	7.01	2.00	32300	7.44	20.0	53.1
P2RI-16D	06/11/11	164.0	3.04	7.23	2.30	37600	7.97	23.0	46.5
P2RI-16D	09/17/11	23.0	0.00	6.72	2.90	45000	10.59	27.0	9.9
P2RI-16D	12/08/11	181.0	0.77	6.73	1.84	30500	8.66	18.6	22.5
P2RI-18SR	03/30/11	197.0	1.15	7.43	2.40	39100	5.90	24.0	51.2
P2RI-18SR	06/10/11	130.0	5.00	7.61	2.10	34300	11.02	21.0	315.0
P2RI-18SR	09/17/11	17.0	7.95	7.27	2.80	43700	16.62	27.0	7.4
P2RI-18D	06/10/11	51.0	2.59	7.06	2.00	33600	8.40	20.0	149.0
P2RI-18D	09/17/11	122.0	0.00	7.07	1.80	30000	9.75	18.0	88.6
P2RI-18D	12/08/11	73.0	0.58	6.98	1.83	30100	10.43	18.4	0.0
P2RI-19D	03/11/11	218.0	0.00	6.39	1.10	19700	7.55	12.0	52.5
P2RI-19D	06/09/11	164.0	3.62	7.21	1.50	26400	8.73	16.0	171.0
P2RI-19D	09/15/11	255.0	8.15	6.24	3.00	47300	9.93	29.0	8.2
P2RI-21S	03/09/11	165.0	5.82	9.09	1.80	30400	5.88	19.0	24.0
P2RI-21S	06/09/11	178.0	6.00	7.48	1.80	30600	8.50	19.0	187.0
P2RI-21S	09/15/11	167.0	1.15	7.29	2.20	35000	13.98	21.0	117.0
P2RI-21D	03/09/11	33.0	3.57	8.90	1.60	26500	7.51	16.0	67.7
P2RI-21D	06/10/11	-6.0	4.81	6.80	1.30	18600	8.75	14.0	999.0
P2RI-22D	06/09/11	-392.0	1.49	7.28	1.80	29300	10.61	18.0	13.5
P2RI-22D	09/15/11	-280.0	0.00	7.23	1.50	26000	11.30	16.0	146.0
P2RI-23D	03/15/11	107.0	0.00	6.93	1.10	18800	7.88	12.0	-5 (a)
P2RI-23D	06/09/11	-104.0	1.58	6.75	1.60	27400	9.24	17.0	0.0
P2RI-23D	09/16/11	6.0	1.97	7.40	0.80	14000	11.90	9.0	28.5
P2RI-24D	03/10/11	-117.0	0.05	7.20	1.20	20500	8.21	13.0	54.2
P2RI-24D	06/10/11	-88.0	3.60	7.52	0.80	13400	12.62	8.0	212.0
P2RI-24D	09/16/11	-132.0	0.21	7.32	1.00	17000	12.82	10.0	8.4
P2RI-25D	03/16/11	184.0	0.60	5.68	1.60	27500	8.00	17.0	56.2
P2RI-25D	06/11/11	216.0	7.33	5.54	1.70	27500	9.01	17.0	4.1
P2RI-25D	09/19/11	71.0	6.95	5.67	2.10	34300	9.31	21.0	24.1
P2RI-26S	03/16/11	114.0	0.69	7.09	1.60	26600	6.64	16.0	3.5
P2RI-26S	06/14/11	141.0	2.94	7.12	2.10	34000	10.64	21.0	0.0
P2RI-26S	09/20/11	184.0	0.00	7.08	1.50	24000	12.38	15.0	34.3
P2RI-26D	03/16/11	206.0	0.41	5.58	1.70	28400	7.76	18.0	22.1
P2RI-26D	06/14/11	223.0	4.90	5.51	1.80	30300	8.49	19.0	20.9
P2RI-26D	09/20/11	244.0	0.83	5.30	1.50	26000	10.85	16.0	180.0
P2RI-27S	03/10/11	157.0	9.95	7.16	1.90	31100	7.19	19.0	>1000
P2RI-27S	06/14/11	78.0	9.88	7.03	2.70	42900	10.00	26.0	286.0
P2RI-27S	12/07/11	167.0	1.86	6.32	1.89	31300	8.84	19.1	2.0
P2RI-27D	06/28/11	-29.0	14.28	7.61	0.50	9640	10.89	6.1	>1000
P2RI-27D	12/07/11	81.0	14.64	7.26	0.54	9910	5.71	6.2	0.0
P2RI-27D	03/20/12	190.0	0.00	7.87	0.47	8720	6.45	5.5	1000.0
P2RI-29S	12/09/11	200.0	6.08	7.00	0.52	9450	9.11	6.0	0.3
P2RI-29S	03/21/12	175.0	0.00	7.65	0.56	10000	11.25	6.2	2.6
P2RI-29S	05/18/12	118.0	2.28	7.15	0.54	9840	9.37	6.2	19.8

TABLE 4.1-3. FIELD PARAMETER DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH (Std Units)	Salinity (%)	Specific Conductance @25°C (umhos/cm)	Temperature (°C)	Total Dissolved Solids (g/L)	Turbidity (NTU)
P2RI-30S	12/09/11	152.0	3.76	6.74	0.53	9530	11.43	6.0	0.0
P2RI-30S	03/21/12	197.0	0.00	7.34	0.59	10600	8.50	6.6	6.2
P2RI-30S	05/21/12	99.0	0.00	7.18	0.53	9450	15.71	6.0	0.0
P2RI-31S	12/10/11	133.0	2.56	7.09	1.68	27900	10.22	17.3	8.9
P2RI-31S	03/22/12	191.0	0.00	7.24	1.59	26500	11.21	16.4	7.2
P2RI-31S	05/21/12	147.0	0.00	7.44	1.96	31700	17.57	19.3	26.0
P2RI-33S	06/13/11	102.0	10.35	7.15	0.30	5270	7.53	3.3	-5 (a)
P2RI-33S	09/16/11	207.0	9.77	7.33	0.20	4790	9.88	3.1	361.0
P2RI-33S	12/07/11	258.0	8.95	7.10	0.31	5900	6.44	3.7	263.0
P2RI-33D	03/17/11	34.0	0.81	6.96	1.40	24200	7.02	15.0	64.9
P2RI-33D	06/13/11	48.0	2.03	7.04	1.40	23500	11.80	14.0	9.5
P2RI-33D	09/16/11	-40.0	0.80	7.24	2.90	44600	13.40	27.0	4.3
P2RI-34D	03/11/11	28.0	0.00	7.80	0.80	15000	9.33	9.0	52.5
P2RI-34D	06/10/11	-11.0	1.40	7.44	1.10	18700	13.81	12.0	14.6
P2RI-34D	09/17/11	121.0	0.00	7.52	0.90	16000	12.25	10.0	5.6
P2RI-35S	06/13/11	-41.0	2.03	6.66	0.70	12400	11.63	8.0	-5 (a)
P2RI-35S	09/15/11	-40.0	0.36	6.78	0.80	13600	13.82	8.0	3.5
P2RI-35S	12/07/11	102.0	1.13	6.78	0.49	8920	8.84	5.6	0.0
P2RI-36S	03/14/11	154.0	1.23	6.72	0.20	4750	6.92	3.0	5.9
P2RI-36S	06/09/11	86.0	3.29	6.93	0.20	4650	9.92	3.0	3.0
P2RI-36S	09/15/11	232.0	1.67	6.98	0.20	4600	13.01	2.9	0.0
P2RI-37S	03/17/11	124.0	0.25	6.50	0.90	15500	7.48	10.0	>1000
P2RI-37S	06/13/11	75.0	2.12	6.74	1.10	18000	11.50	11.0	13.6
P2RI-37S	09/16/11	119.0	2.48	6.94	1.80	29500	12.60	18.0	67.7
P2RI-37D	06/27/11	80.0	6.51	7.29	0.70	13100	11.03	8.0	0.7
P2RI-37D	09/16/11	147.0	0.53	7.45	1.50	24800	15.97	16.0	13.3
P2RI-37D	12/07/11	91.0	1.12	7.21	0.53	9570	8.67	6.0	0.0
P2RI-37D	03/20/12	-18.0	0.00	7.57	0.53	9620	8.40	6.1	61.9
P2RI-40S	03/10/11	155.0	0.73	7.26	1.70	28800	8.52	18.0	2.9
P2RI-40S	06/08/11	242.0	0.52	7.53	4.00	99900 (a)	7.90	99.0	-5 (a)
P2RI-40S	09/15/11	203.0	0.00	7.46	3.60	55700	11.03	33.0	19.9
P2RI-41S	03/11/11	158.0	9.36	7.50	0.20	4700	5.66	3.0	>1000
P2RI-41D	03/11/11	-33.0	0.35	8.24	0.50	9560	7.40	6.0	108.0
P2RI-41D	06/11/11	-19.0	3.60	8.14	0.60	10800	12.00	7.0	61.2
P2RI-41D	09/17/11	-95.0	0.21	7.81	0.50	9600	13.69	5.1	6.7
P2RI-43S	03/16/11	36.0	0.10	7.00	1.80	30000	8.51	19.0	-5 (a)
P2RI-43S	06/11/11	16.0	1.85	6.80	2.40	38400	11.90	23.0	556.0
P2RI-43S	09/19/11	-22.0	0.00	6.94	2.70	43600	9.22	27.0	192.0
P2RI-43D	03/30/11	172.0	0.49	7.75	0.30	6600	8.18	4.2	165.0
P2RI-43D	06/11/11	-95.0	1.80	7.52	0.40	6800	13.75	4.3	59.9
P2RI-43D	09/19/11	-115.0	0.28	7.69	0.40	6760	8.05	4.3	48.5
P2RI-43D	12/09/11	-57.0	1.03	7.55	0.30	5670	8.88	3.6	14.6
P2RI-44SR	06/10/11	60.0	1.65	6.95	1.10	19700	10.48	12.0	191.0
P2RI-44SR	09/16/11	125.0	0.00	7.04	1.00	17000	11.43	11.0	120.0
P2RI-44SR	12/06/11	89.0	0.74	6.94	0.88	15500	9.14	9.6	39.0
P2RI-44SR	03/20/12	200.0	0.00	7.44	0.93	16200	8.95	10.0	0.0
P2RI-44D	03/10/11	187.0	1.25	7.35	0.90	16200	9.19	10.0	286.0
P2RI-44D	06/10/11	24.0	1.67	7.63	0.90	16400	11.38	10.0	62.8
P2RI-44D	09/16/11	-157.0	0.00	7.73	0.80	14000	11.43	9.0	203.0
P2RI-44D	12/06/11	-9.0	1.65	7.61	0.69	12300	9.93	7.6	0.0
P2RI-45S	03/16/11	-30.0	2.79	7.03	0.90	16200	6.77	10.0	393.0
P2RI-45S	06/11/11	-43.0	2.58	6.74	1.20	20500	12.00	13.0	32.6
P2RI-45S	09/19/11	58.0	0.80	6.90	0.90	16000	9.00	10.0	13.9
P2RI-45D	09/19/11	130.0	4.61	6.94	2.10	35000	7.82	21.0	-5 (a)
P2RI-45D	12/09/11	103.0	6.69	6.49	1.96	32300	8.47	19.7	33.0
P2RI-45D	03/22/12	-28.0	0.00	7.19	2.14	34600	13.26	21.1	30.4
P2RI-46S	03/15/11	128.0	3.93	7.33	3.20	50100	7.55	30.0	-5 (a)
P2RI-46S	06/11/11	103.0	2.21	7.01	4.00	62800	11.64	38.0	101.0
P2RI-46S	09/19/11	112.0	12.62	7.14	3.40	52000	12.62	31.0	6.4

TABLE 4.1-3. FIELD PARAMETER DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH (Std Units)	Salinity (%)	Specific Conductance @25°C (umhos/cm)	Temperature (°C)	Total Dissolved Solids (g/L)	Turbidity (NTU)
P2RI-46D	03/15/11	22.0	7.66	7.45	2.30	37500	8.45	23.0	-5 (a)
P2RI-46D	06/11/11	-141.0	10.10	7.53	2.80	44100	12.36	27.0	463.0
P2RI-46DFL	03/15/11	-32.0	6.97	7.55	0.60	10800	9.00	7.0	-5 (a)
P2RI-46DFL	06/13/11	-138.0	3.38	6.56	0.80	14400	10.89	9.0	-5 (a)
P2RI-46DFL	09/19/11	34.0	11.61	6.38	0.60	11000	9.70	7.0	-5 (a)
P2RI-47S	03/17/11	156.0	0.00	7.45	0.80	13400	9.48	8.0	-5 (a)
P2RI-47S	06/14/11	169.0	6.46	7.16	0.60	10600	13.92	7.0	62.9
P2RI-47S	09/20/11	184.0	7.39	6.95	0.50	9200	11.51	5.8	13.5
P2RI-48S	03/15/11	180.0	3.24	7.51	3.90	60400	6.07	36.0	41.2
P2RI-48S	06/14/11	143.0	4.79	7.65	4.00	68500	12.01	41.0	14.9
P2RI-48S	09/17/11	29.0	2.20	7.27	4.00	79800	15.22	48.0	0.3
P2RI-49S	03/11/11	218.0	0.00	7.30	4.00	61800	6.59	37.0	-5 (a)
P2RI-49S	06/14/11	171.0	7.12	7.36	4.00	62400	9.08	37.0	0.0
P2RI-50S	03/15/11	64.0	0.71	6.71	1.20	20100	7.86	12.0	175.0
P2RI-50S	06/10/11	88.0	1.61	6.65	1.30	21200	12.69	13.0	137.0
P2RI-50S	09/16/11	190.0	0.34	6.64	1.00	18000	14.72	11.0	163.0
P2RI-50S	05/21/12	223.0	0.00	6.95	1.04	17600	17.05	10.9	73.8
P2RI-51S	03/10/11	142.0	7.60	7.31	1.00	18300	5.82	11.0	>1000
P2RI-51S	06/09/11	149.0	8.20	7.48	1.30	22300	9.32	14.0	238.0
P2RI-51S	09/12/11	83.0	0.00	7.27	0.80	13200	15.10	8.0	18.2
P2RI-51S	12/03/11	62.0	1.23	7.07	0.86	16300	9.30	9.4	273.0
P2RI-51S	03/17/12	140.0	4.27	7.11	0.94	16700	6.17	10.3	43.8
P2RI-51S	05/17/12	157.0	1.95	7.72	0.88	15200	16.57	9.4	51.6
P2RI-53S	06/15/11	144.0	2.36	6.92	2.70	43600	9.21	27.0	219.0
P2RI-53S	09/16/11	-29.0	0.00	6.80	3.20	49700	13.46	30.0	26.1
P2RI-53S	12/08/11	55.0	1.94	6.86	2.12	34600	9.36	21.1	18.0
P2RI-53S	03/22/12	98.0	0.00	6.86	2.00	33200	6.48	20.3	0.0
P2RI-54SU	06/15/11	179.0	5.89	7.10	3.40	53200	10.14	32.0	1.4
P2RI-54SU	09/16/11	25.0	0.38	7.23	3.60	55500	14.15	33.0	26.7
P2RI-54SU	12/08/11	244.0	9.76	6.89	2.33	38300	5.94	23.4	25.2
P2RI-54SU	03/20/12	46.0	0.80	7.45	2.26	36800	7.83	22.5	0.0
P2RI-54SM	06/15/11	-251.0	1.69	6.99	1.20	20200	9.84	13.0	91.3
P2RI-54SM	09/16/11	-196.0	0.08	7.15	1.30	21600	11.17	13.0	55.2
P2RI-54SM	03/20/12	-130.0	0.79	7.30	0.81	14300	7.70	8.9	20.7
P2RI-54SL	06/27/11	-176.0	3.02	7.29	0.40	7840	15.38	4.9	178.0
P2RI-54SL	09/16/11	-164.0	0.16	7.16	0.30	6530	15.57	4.1	85.6
P2RI-54SL	03/20/12	-140.0	2.82	7.44	0.34	6400	6.65	4.0	74.8
P2RI-54SL	05/20/12	-145.0	0.94	6.96	0.34	6350	12.21	4.0	34.2
P2RI-55S	03/20/12	278.0	3.78	7.13	0.34	6390	9.59	4.0	424.0
P2RI-55S	05/20/12	148.0	10.15	7.17	0.34	6330	10.73	4.0	178.0
P2RI-56DF	12/09/11	66.0	0.00	7.21	0.52	9610	4.06	6.1	57.0
P2RI-56DF	03/22/12	-95.0	0.88	7.46	0.62	11200	8.40	6.9	18.3
P2RI-56DF	05/21/12	-134.0	0.00	7.87	0.64	11300	16.24	7.0	5.4
P2RI-57S	12/07/11	170.0	9.83	7.63	0.14	2780	5.62	1.8	89.6
P2RI-57S	03/20/12	54.0	0.00	7.18	0.14	2860	5.18	1.8	500.0
P2RI-57S	05/20/12	242.0	2.55	7.38	0.13	2480	16.33	1.6	88.8
P2RI-58S	12/08/11	167.0	7.35	7.11	3.07	48700	7.58	29.8	591.0
P2RI-58S	03/20/12	167.0	7.32	7.56	2.71	43400	9.13	26.4	4.0
P2RI-58S	05/20/12	217.0	1.72	8.22	3.17	48700	19.20	29.7	0.7
P2RI-59S	12/08/11	181.0	5.25	7.24	3.35	52500	8.87	31.5	0.0
P2RI-59S	03/20/12	159.0	1.54	8.05	3.36	52800	8.63	31.7	1.6
P2RI-59S	05/21/12	105.0	1.48	7.33	3.54	54200	15.23	32.5	2.5
P2RI-60S	12/07/11	179.0	5.15	6.73	1.58	26700	6.43	16.6	21.1
P2RI-60S	03/21/12	122.0	0.00	6.96	1.30	22200	8.70	13.8	13.1
P2RI-60S	05/21/12	-8.0	1.32	6.81	1.42	23800	11.81	14.8	58.1
P2RI-61S	12/08/11	151.0	1.00	7.24	1.93	32500	4.96	19.8	660.0
P2RI-61S	03/21/12	161.0	0.00	7.45	1.86	31100	6.25	19.0	0.0
P2RI-61S	05/21/12	101.0	1.37	7.31	1.95	31600	14.65	19.3	0.0

TABLE 4.1-3. FIELD PARAMETER DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH (Std Units)	Salinity (%)	Specific Conductance @25°C (umhos/cm)	Temperature (°C)	Total Dissolved Solids (g/L)	Turbidity (NTU)
P2RI-62S	12/08/11	128.0	7.54	7.20	2.12	34800	7.38	21.3	0.0
P2RI-62S	03/22/12	149.0	3.16	7.39	1.90	31500	7.56	19.2	7.0
P2RI-62S	05/21/12	92.0	7.82	7.01	2.10	34000	12.95	20.7	47.1
P2RI-63S	05/20/12	256.0	3.02	8.14	3.14	49500	9.64	30.2	4.9
GW-A	03/09/11	-125.0	0.19	7.09	1.00	18200	5.06	11.0	280.0
GW-C-24	03/09/11	-28.0	0.98	9.55	1.50	24800	8.13	15.0	258.0
GW-C-24	06/07/11	-157.0	1.53	9.30	1.50	25700	10.01	16.0	0.0
GW-C-24	09/14/11	-203.0	0.21	8.44	1.90	30500	11.01	19.0	15.8
GW-C-24	12/06/11	89.0	1.99	7.71	1.10	19400	13.18	12.1	59.9
GW-C-25	06/07/11	-4.0	4.41	7.57	2.10	34600	9.69	21.0	0.0
GW-C-25	03/19/12	141.0	6.63	6.99	2.19	36000	7.76	21.9	0.0
GW-C-29	03/14/11	190.0	0.00	6.72	1.60	26500	7.93	16.0	17.8
GW-C-29	06/08/11	163.0	2.00	6.66	2.00	32300	8.13	20.0	0.0
GW-C-29	09/15/11	150.0	0.00	2.90	1.80	6720	10.58	18.0	67200.0
GW-C-45	03/09/11	147.0	0.29	6.98	2.10	33500	11.18	20.0	141.0
GW-C-45	06/08/11	150.0	2.78	6.50	2.40	38600	9.23	24.0	409.0
GW-C-45	09/14/11	150.0	3.06	6.74	2.10	33700	14.11	21.0	250.0
GW-C-46S	03/09/11	30.0	0.79	6.71	2.10	33900	8.25	21.0	236.0
GW-C-46S	06/08/11	118.0	0.41	6.85	4.00	99900 (a)	8.76	99.0	215.0
GW-C-46S	09/14/11	-143.0	0.09	6.57	2.80	45100	11.91	27.0	40.4
GW-C-46S	12/06/11	-34.0	1.38	6.76	1.73	28600	9.80	17.8	16.9
GW-C-46DF	03/09/11	58.0	0.00	7.50	0.60	10900	10.39	7.0	830.0
GW-C-47S	03/14/11	29.0	0.86	6.64	2.00	32000	8.07	20.0	678.0
GW-C-47S	06/08/11	22.0	1.92	6.70	2.10	34300	8.20	21.0	458.0
GW-C-47S	12/06/11	65.0	0.75	6.72	1.72	28600	8.85	17.7	336.0
GW-C-47DF	03/12/11	-134.0	5.03	13.63	0.50	9650	7.58	6.1	766.0
GW-C-48	03/11/11	154.0	0.73	6.46	3.40	53600	7.24	32.0	165.0
GW-C-48	06/11/11	178.0	0.94	6.57	4.00	99900 (a)	11.87	99.0	874.0
GW-C-48	09/15/11	171.0	0.00	6.47	3.10	49000	12.83	30.0	109.0
GW-C-48	12/06/11	157.0	0.88	6.46	2.89	46300	7.43	28.3	56.9
GW-CS	03/11/11	143.0	0.00	6.84	2.40	39000	8.87	24.0	48.4
GW-CS	06/08/11	272.0	0.00	6.76	4.00	99900 (a)	7.21	99.0	-5 (a)
GW-CS	09/14/11	42.0	1.26	6.46	2.30	36400	10.27	22.0	75.6
GW-CS	12/06/11	143.0	2.94	6.30	1.59	26400	9.83	16.5	14.8
GW-ES	03/15/11	274.0	4.23	6.93	2.40	39500	6.95	24.0	341.0
GW-ES	06/08/11	296.0	0.00	6.67	4.00	99900 (a)	8.41	99.0	187.0
GW-ES	09/15/11	23.0	0.00	6.74	3.70	56500	11.13	34.0	9.6
GW-ED	03/15/11	300.0	6.09	7.40	1.80	29200	7.36	18.0	-5 (a)
GW-ED	06/08/11	217.0	0.00	7.49	4.00	99900 (a)	9.68	99.0	-5 (a)
GW-ED	09/12/11	-31.0	0.31	7.19	2.70	42100	11.72	26.0	32.0
GW-FS	03/08/11	51.0	0.65	7.10	2.00	32400	6.75	20.0	9.7
GW-FS	06/07/11	63.0	1.80	7.13	1.90	31800	8.14	19.0	41.8
GW-FS	09/13/11	-10.0	1.18	7.20	2.30	36800	11.38	22.0	16.9
GW-GS	03/08/11	68.0	0.94	7.46	1.30	23400	3.95	15.0	38.0
GW-GS	06/07/11	145.0	1.49	7.30	1.30	21900	10.10	14.0	22.1
GW-GS	09/13/11	21.0	0.00	7.35	1.50	24900	11.56	15.0	25.8
GW-H	03/09/11	204.0	0.60	6.21	4.00	66500	7.96	40.0	102.0
GW-L	09/13/11	151.0	0.00	6.59	2.40	38900	12.63	24.0	790.0
GW-L	12/06/11	192.0	1.21	6.35	2.37	38400	9.36	23.4	132.0
GW-L	03/19/12	179.0	0.98	6.39	2.49	40300	8.05	24.6	170.0
GW-MS	03/14/11	154.0	1.46	7.01	1.80	29800	6.65	19.0	8.3
GW-MS	06/08/11	125.0	2.80	6.84	2.00	33000	7.94	20.0	0.0
GW-MS	09/15/11	-11.0	1.08	6.85	2.70	43000	12.62	26.0	10.1
GW-MDF	03/12/11	86.0	6.92	10.51	0.80	13900	5.07	9.0	0.0
GW-MDF	06/08/11	70.0	5.55	7.45	1.30	22800	8.91	14.0	188.0
GW-NS	03/15/11	132.0	0.00	7.17	1.90	32400	4.66	20.0	>1000
GW-NS	06/07/11	74.0	1.12	7.52	4.00	99900 (a)	6.25	99.0	-5 (a)
GW-NS	03/19/12	150.0	1.45	7.44	1.58	26900	5.17	16.7	4.7
GW-NS	05/20/12	207.0	9.34	7.80	1.72	28500	9.77	17.7	246.0

TABLE 4.1-3. FIELD PARAMETER DATA, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH (Std Units)	Salinity (%)	Specific Conductance @25°C (umhos/cm)	Temperature (°C)	Total Dissolved Solids (g/L)	Turbidity (NTU)
GW-ND	03/15/11	155.0	0.53	6.98	2.40	38900	7.08	24.0	99.1
GW-ND	06/07/11	45.0	0.32	6.93	4.00	99900 (a)	6.86	99.0	-5 (a)
GW-ND	09/14/11	123.0	0.00	6.87	2.90	46000	11.71	28.0	67.4
GW-ND	12/06/11	181.0	0.76	6.74	2.19	35800	8.94	21.8	3.4
GW-ND	03/19/12	154.0	0.00	6.91	2.04	33800	6.93	20.6	4.5
GW-ND	05/18/12	239.0	0.00	7.48	2.16	35000	11.48	21.4	71.0
PA-5R	12/10/11	190.0	4.60	7.10	2.50	40100	9.96	24.5	0.0
PA-5R	03/22/12	188.0	1.26	7.81	3.14	49600	8.60	30.3	0.3
PA-5R	05/21/12	173.0	1.23	7.94	3.11	48000	17.59	29.3	0.0

Notes:

(a) - error reading, water quality meter was displaying a flashing number

mV - milivolts

g/L - grams per liter

Std - Standard

% - Percent

umhos/cm - Microohms per centimeter

°C- Degrees Celsius

NTU - Nephelometric turbidity unit

TABLE 4.3-1. SUBSURFACE SOIL SAMPLE DEVIATIONS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well ID	Deviation	Rationale
P2RI-1S	--	Soil sample collected from shallow well screen interval during P2RI-1D installation.
P2RI-2	No Sample	No recovery at well screen interval.
P2RI-4S	Incorrect Depth	Depth recorded in CSM Addendum incorrect; sample depth is 21-25 ft-bgs NOT 12-15 ft-bgs.
P2RI-5	No Sample	A result of drilling conditions. Overdrilled then backfilled up to the screen interval. Did not anticipate screening upper zone.
P2RI-7	No Sample	No rationale provided.
P2RI-21	Incorrect Identification	Reported as P2RI-21S in CSM Addendum; correct ID is P2RI-21D.
P2RI-22D	No Sample	No rationale provided.
P2RI-25D	No Sample	No recovery at well screen interval.
P2RI-40S	No Sample	No rationale provided.
P2RI-42S	No Sample	This is a recovery well. Sample collected from TB10-F05-DP01.
P2RI-43D	No Sample	Did not anticipate screening well at 54-64 ft-bgs because it was dry during drilling.
P2RI-46DFL	Incorrect Depth	Sampled 90-91 ft-bgs because this was an area of a water-bearing fracture. No cuttings returned from deeper intervals.
P2RI-46DFU	--	Soil sample collected from well screen area during installation of P2RI-46DFU.
P2RI-51S	No Sample	0-8 ft-bgs was removed for hydrovac utility clearance. Standing water at 7 ft-bgs causing soil sample within well screen interval to be saturated sluff.
P2RI-54SM	No Sample	Due to drilling conditions, this location was drilled with a center bit and no continuous core sampling barrel. This location was added based off observations when drilling P2RI-54SL.
VCP06-RW	No Sample	This is a recovery well. Sample collected from VCP-A02-DP01 (6-8').
GW-5RR	No Sample	Did not anticipate setting well because it was dry during drilling.
GW-C-24	No Sample	Converted sonic boring.
GW-C-29	No Sample	Drilled new location but sample collected from original sonic boring.
GW-C-45	No Sample	Drilled new location but sample collected from original sonic boring.
GW-C-46DF	No Sample	Converted sonic boring.
GW-C-47DF	No Sample	Converted sonic boring.
GW-H	No Sample	Converted sonic boring.
GW-ND	No Sample	Converted sonic boring.

Notes:
ft-bgs - feet below ground surface
-- No deviation but explanation provided

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-1S	01/27/10	Bailer	No	22.41	28.55	3393.070	3390.400	18.5 - 23.5	X	X	X	X	X	X	X	--	X	X
P2RI-1S	06/22/10	Bailer	No	20.87	26.47	3393.070	3390.400	18.5 - 23.5	X	X	X	X	X	X	X	--	X	X
P2RI-1S	09/21/10	Bailer	No	21.00	26.48	3393.070	3390.400	18.5 - 23.5	X	X	X	X	X	X	X	--	X	X
P2RI-1S	10/27/10	Bailer	No	20.50	26.49	3393.070	3390.400	18.5 - 23.5	X	X	X	X	X	X	X	--	X	X
P2RI-1D	06/24/10	Bailer	No	54.62	55.28	3393.550	3390.900	47 - 52	X	--	--	--	--	--	--	--	X	--
P2RI-1D	03/11/11	Bailer	No	53.97	55.28	3393.550	3390.900	47 - 52	X	--	--	--	--	--	--	--	X	--
P2RI-1D	06/08/11	Bailer	No	54.00	55.31	3393.550	3390.900	47 - 52	X	--	--	--	--	--	--	X	X	X
P2RI-1D	09/13/11	Bailer	No	54.52	55.29	3393.550	3390.900	47 - 52	X	X	--	--	--	--	--	--	X	--
P2RI-2	06/24/10	Bailer	No	31.40	32.11	3450.210	3447.300	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-2	09/23/10	Bailer	No	31.31	31.95	3450.210	3447.300	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-2	10/28/10	Bailer	No	31.42	31.95	3450.210	3447.300	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-2	03/15/11	Bailer	No	31.17	32.13	3450.210	3447.300	24 - 29	X	X	--	--	--	--	--	--	X	--
P2RI-3S	10/25/10	Bailer	No	22.05	23.32	3402.510	3400.030	15 - 20	X	X	--	--	--	--	--	--	X	--
P2RI-3S	03/15/11	Bailer	No	20.04	23.31	3402.510	3400.030	15 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-3S	06/08/11	Bailer	No	21.11	23.32	3402.510	3400.030	15 - 20	X	X	--	--	--	--	--	--	X	X
P2RI-3S	09/13/11	Bailer	No	16.76	23.31	3402.510	3400.030	15 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-3D	02/18/10	Bailer	No	80.44	86.10	3402.910	3400.580	77 - 82	X	--	--	--	--	--	--	--	X	--
P2RI-3D	09/20/10	Bailer	No	83.33	86.81	3402.910	3400.580	77 - 82	X	--	--	--	--	--	--	--	X	--
P2RI-3D	10/25/10	Bailer	No	84.91	85.51	3402.910	3400.580	77 - 82	X	--	--	--	--	--	--	--	X	--
P2RI-3D	03/15/11	Bailer	No	83.56	85.25	3402.910	3400.580	77 - 82	X	X	--	--	--	--	--	--	X	--
P2RI-4S	10/26/10	Bailer	No	27.75	28.05	3448.610	3445.740	20 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-4S	03/15/11	Bailer	No	27.41	28.11	3448.610	3445.740	20 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-4S	12/09/11	Bailer	No	27.28	28.11	3448.610	3445.740	20 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-4S	03/21/12	Bailer	No	27.35	28.11	3448.610	3445.740	20 - 25	X	X	--	--	--	--	--	--	X	--
P2RI-4S	05/20/12	Bailer	No	27.58	28.12	3448.610	3445.740	20 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-4D	01/27/10	Pump	No	25.62	42.30	3448.520	3445.810	34 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-4D	06/22/10	Pump	No	24.84	42.20	3448.520	3445.810	34 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-4D	09/21/10	Pump	Yes - MS/MSD	24.55	42.25	3448.520	3445.810	34 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-4D	10/26/10	Pump	Yes - MS/MSD	23.45	41.95	3448.520	3445.810	34 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-5	01/29/10	Pump	No	13.20	26.63	3442.230	3439.260	18 - 23	X	X	X	X	X	X	X	X	X	X
P2RI-5	06/22/10	Bailer	No	13.82	26.75	3442.230	3439.260	18 - 23	X	X	X	X	X	X	X	--	X	X
P2RI-5	09/23/10	Bailer	No	11.88	26.23	3442.230	3439.260	18 - 23	X	X	X	X	X	X	X	--	X	X
P2RI-5	10/28/10	Bailer	No	11.76	26.62	3442.230	3439.260	18 - 23	X	X	X	X	X	X	X	--	X	X
P2RI-5	03/15/11	Pump	No	11.19	26.52	3442.230	3439.260	18 - 23	X	X	X	X	X	X	X	--	X	X
P2RI-5	06/13/11	Pump	Yes - MS/MSD	11.40	26.57	3442.230	3439.260	18 - 23	X	X	X	X	X	X	X	--	X	X
P2RI-5S	06/28/11	Bailer	No	15.13	16.36	3442.299	3439.165	8 - 13	X	X	--	--	--	--	--	X	X	X
P2RI-5S	09/19/11	Bailer	No	13.19	16.37	3442.299	3439.165	8 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-5S	12/09/11	Bailer	No	13.30	16.36	3442.299	3439.165	8 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-5S	03/21/12	Bailer	No	12.70	16.37	3442.299	3439.165	8 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-6	01/29/10	Pump	No	24.45	30.10	3458.180	3455.770	22 - 27	X	X	X	X	X	X	X	X	X	X
P2RI-6	06/23/10	Bailer	No	25.03	30.29	3458.180	3455.770	22 - 27	X	X	X	X	X	X	X	X	X	X
P2RI-6	09/23/10	Bailer	No	24.91	30.32	3458.180	3455.770	22 - 27	X	X	X	X	X	X	X	X	X	X
P2RI-6	10/28/10	Bailer	No	25.03	30.30	3458.180	3455.770	22 - 27	X	X	X	X	X	X	X	X	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-7	03/10/11	Bailer	No	31.62	32.30	3463.890	3461.150	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-7	06/09/11	Bailer	No	31.56	32.36	3463.890	3461.150	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-7	09/19/11	Bailer	No	31.57	32.29	3463.890	3461.150	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-7	12/09/11	Bailer	No	31.56	32.30	3463.890	3461.150	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-7	03/21/12	Bailer	No	31.55	32.30	3463.890	3461.150	24 - 29	X	--	--	--	--	--	--	--	X	--
P2RI-8	09/20/11	Bailer	No	39.96	40.14	3429.740	3426.950	32 - 37	X	--	--	--	--	--	--	--	--	--
P2RI-8	12/07/11	Bailer	No	39.91	40.35	3429.740	3426.950	32 - 37	X	--	--	--	--	--	--	--	--	--
P2RI-8	03/19/12	Bailer	No	39.70	40.20	3429.740	3426.950	32 - 37	X	--	--	--	--	--	--	--	X	--
P2RI-8	05/20/12	Bailer	No	39.17	40.18	3429.740	3426.950	32 - 37	X	--	--	--	--	--	--	--	X	--
P2RI-9S	01/29/10	Bailer	No	15.45	22.51	3350.380	3348.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-9S	06/23/10	Pump	No	13.28	22.31	3350.380	3348.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-9S	09/21/10	Bailer	No	13.52	22.31	3350.380	3348.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-9S	10/27/10	Bailer	No	13.89	20.04	3350.380	3348.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-9D	01/29/10	Pump	No	17.91	55.72	3350.600	3348.340	48 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-9D	06/23/10	Pump	No	15.60	55.43	3350.600	3348.340	48 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-9D	09/21/10	Pump	No	15.56	55.79	3350.600	3348.340	48 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-9D	10/27/10	Pump	No	15.66	54.72	3350.600	3348.340	48 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-10S	01/29/10	Bailer	No	13.95	14.75	3432.000	3432.590	10 - 15	X	--	--	X	X	X	--	--	X	--
P2RI-10S	06/24/10	Bailer	No	13.60	14.70	3432.000	3432.590	10 - 15	X	--	--	--	--	--	--	--	X	X
P2RI-10S	09/20/10	Bailer	No	11.43	14.73	3432.000	3432.590	10 - 15	X	X	X	X	X	X	--	--	X	X
P2RI-10S	10/25/10	Bailer	No	12.58	14.60	3432.000	3432.590	10 - 15	X	--	--	--	--	--	--	--	X	X
P2RI-10D	10/25/10	NA	NA	DRY	72.98	3431.550	3432.030	67 - 72	--	--	--	--	--	--	--	--	--	--
P2RI-10D	06/09/11	NA	NA	DRY	71.62	3431.550	3432.030	67 - 72	--	--	--	--	--	--	--	--	--	--
P2RI-10D	09/17/11	NA	NA	DRY	71.64	3431.550	3432.030	67 - 72	--	--	--	--	--	--	--	--	--	--
P2RI-10D	12/01/11	NA	NA	DRY	71.67	3431.550	3432.030	67 - 72	--	--	--	--	--	--	--	--	--	--
P2RI-11S	01/29/10	Bailer	No	10.35	22.41	3434.760	3431.860	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-11S	06/23/10	Bailer	No	11.74	22.45	3434.760	3431.860	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-11S	09/21/10	Bailer	Yes - BD	10.23	22.49	3434.760	3431.860	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-11S Dup	09/21/10	Bailer	NA	10.23	22.49	3434.760	3431.860	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-11S	10/27/10	Bailer	Yes - BD	9.98	22.39	3434.760	3431.860	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-11S Dup	10/27/10	Bailer	NA	9.98	22.39	3434.760	3431.860	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-11D	10/27/10	NA	NA	DRY	61.60	3434.950	3432.380	53.75 - 58.75	--	--	--	--	--	--	--	--	--	--
P2RI-11D	06/09/11	NA	NA	61.71	61.73	3434.950	3432.380	53.75 - 58.75	--	--	--	--	--	--	--	--	--	--
P2RI-11D	09/14/11	NA	NA	61.66	61.71	3434.950	3432.380	53.75 - 58.75	--	--	--	--	--	--	--	--	--	--
P2RI-11D	12/01/11	NA	NA	61.70	61.72	3434.950	3432.380	53.75 - 58.75	--	--	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	Bailer	No	5.19	11.41	3412.370	3412.870	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-12	09/22/10	Bailer	No	7.95	11.43	3412.370	3412.870	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-12	10/25/10	Bailer	No	5.56	11.42	3412.370	3412.870	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-12	03/30/11	Bailer	No	9.09	11.43	3412.370	3412.870	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-13	10/25/10	NA	NA	DRY	11.82	3410.580	3410.970	7 - 12	--	--	--	--	--	--	--	--	--	--
P2RI-13	06/09/11	NA	NA	11.79	11.81	3410.580	3410.970	7 - 12	--	--	--	--	--	--	--	--	--	--
P2RI-13	09/13/11	NA	NA	11.79	11.84	3410.580	3410.970	7 - 12	--	--	--	--	--	--	--	--	--	--
P2RI-13	12/01/11	NA	NA	11.78	11.81	3410.580	3410.970	7 - 12	--	--	--	--	--	--	--	--	--	--

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-14	01/28/10	Bailer	No	13.41	16.65	3391.180	3391.780	12 - 17	X	X	X	X	X	X	X	X	X	X
P2RI-14	06/24/10	Bailer	No	15.26	16.80	3391.180	3391.780	12 - 17	X	--	--	--	--	--	--	--	X	--
P2RI-14	09/22/10	Bailer	No	13.63	16.60	3391.180	3391.780	12 - 17	X	X	X	X	X	X	X	--	X	X
P2RI-14	10/27/10	Bailer	No	13.90	16.35	3391.180	3391.780	12 - 17	X	X	X	X	X	X	X	--	X	X
P2RI-15	10/25/10	NA	NA	DRY	9.81	3408.000	3408.560	5 - 10	--	--	--	--	--	--	--	--	--	--
P2RI-15	06/09/11	NA	NA	9.57	9.82	3408.000	3408.560	5 - 10	--	--	--	--	--	--	--	--	--	--
P2RI-15	09/13/11	Bailer	No	9.60	9.84	3408.000	3408.560	5 - 10	X	--	--	--	--	--	--	--	--	--
P2RI-15	12/07/11	NA	NA	9.70	9.83	3408.000	3408.560	5 - 10	--	--	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	Bailer	No	8.30	16.89	3380.680	3381.100	12.4 - 17.4	X	X	X	X	X	X	X	--	X	X
P2RI-16S	06/24/10	Pump	No	5.63	16.90	3380.680	3381.100	12.4 - 17.4	X	X	X	X	X	X	X	--	X	X
P2RI-16S	09/22/10	Bailer	No	5.50	16.90	3380.680	3381.100	12.4 - 17.4	X	X	X	X	X	X	X	--	X	X
P2RI-16S	10/26/10	Bailer	No	5.52	16.65	3380.680	3381.100	12.4 - 17.4	X	X	X	X	X	X	X	--	X	X
P2RI-16D	03/10/11	Pump	Yes - BD	3.68	19.21	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D Dup	03/10/11	Pump	NA	3.68	19.21	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D	06/11/11	Pump	Yes - BD	2.39	19.50	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D Dup	06/11/11	Pump	NA	2.39	19.50	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D [b]	06/24/11					3381.282	3381.585	14.5 - 19.5	X	--	--	--	--	--	--	--	--	--
P2RI-16D [b]	07/22/11					3381.282	3381.585	14.5 - 19.5	X	--	--	--	--	--	--	--	--	--
P2RI-16D	09/17/11	Pump	Yes - BD	1.74	19.64	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D Dup	09/17/11	Pump	NA	1.74	19.64	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D	12/08/11	Pump	Yes - BD	2.95	19.61	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-16D Dup	12/08/11	Pump	NA	2.95	19.61	3381.282	3381.585	14.5 - 19.5	X	X	X	X	X	X	X	--	X	X
P2RI-17	01/28/10	Pump	No	8.23	14.00	3376.470	3376.910	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-17	06/24/10	Pump	No	5.61	13.99	3376.470	3376.910	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-17	09/20/10	Pump	No	6.65	14.02	3376.470	3376.910	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-17	10/25/10	Pump	No	6.87	13.81	3376.470	3376.910	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-18[1]	01/28/10	Pump	No	2.14	15.01	3374.960	3374.600	10.5 - 15.5	X	X	X	X	X	X	X	X	X	X
P2RI-18[1]	06/23/10	Pump	Yes - BD	0.00	14.92	3374.960	3374.600	10.5 - 15.5	X	X	X	X	X	X	X	--	X	X
P2RI-18[1] Dup	06/23/10	Pump	NA	0.00	14.92	3374.960	3374.600	10.5 - 15.5	X	X	X	X	X	X	X	--	X	X
P2RI-18SR	11/05/10	Bailer	No	2.71	11.45	3374.190	3374.437	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-18SR	03/30/11	Pump	No	3.01	11.49	3374.190	3374.437	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-18SR	06/10/11	Pump	No	0.08	11.49	3374.190	3374.437	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-18SR [b]	06/24/11					3374.190	3374.437	7 - 12	X	--	--	--	--	--	--	--	--	--
P2RI-18SR [b]	07/22/11					3374.190	3374.437	7 - 12	X	--	--	--	--	--	--	--	--	--
P2RI-18SR	09/17/11	Pump	No	4.28	12.07	3374.190	3374.437	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-18D	11/04/10	Pump	Yes - BD	0.00	18.85	3375.053	3375.481	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-18D Dup	11/04/10	Pump	NA	0.00	18.85	3375.053	3375.481	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-18D	06/10/11	Pump	Yes - MS/MSD	0.00	18.67	3375.053	3375.481	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-18D	09/17/11	Pump	Yes - MS/MSD	0.00	18.68	3375.053	3375.481	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-18D	12/08/11	Pump	Yes - MS/MSD	0.00	18.70	3375.053	3375.481	14 - 19	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

								Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-19S	01/28/10	Pump/Bailer	No	8.49	12.90	3364.340	3364.750	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-19S	06/24/10	Bailer	No	5.67	12.87	3364.340	3364.750	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-19S	09/22/10	Bailer	No	7.06	12.91	3364.340	3364.750	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-19S	10/27/10	Bailer	No	6.74	12.92	3364.340	3364.750	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-19D	11/16/10	Pump	No	5.21	24.90	3364.453	3364.752	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-19D	03/11/11	Pump	Yes - MS/MSD	6.44	24.92	3364.453	3364.752	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-19D	06/09/11	Pump	No	4.18	24.94	3364.453	3364.752	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-19D	09/15/11	Pump	Yes - BD	4.71	24.95	3364.453	3364.752	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-19D Dup	09/15/11	Pump	NA	4.71	24.95	3364.453	3364.752	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-20	01/28/10	Pump	Yes - BD	7.68	17.39	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-20 Dup	01/28/10	Pump	NA	7.68	17.39	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-20	06/24/10	Pump	No	4.14	17.37	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-20	09/20/10	Pump	Yes - BD	4.66	17.40	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-20 Dup	09/20/10	Pump	NA	4.66	17.40	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-20	10/25/10	Pump	Yes - BD	5.11	17.34	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-20 Dup	10/25/10	Pump	NA	5.11	17.34	3361.850	3362.470	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-21S	11/05/10	Bailer	No	6.38	18.19	3352.243	3352.665	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-21S	03/09/11	Pump	No	8.29	18.17	3352.243	3352.665	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-21S	06/09/11	Pump	No	1.62	18.40	3352.243	3352.665	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-21S	09/15/11	Pump	No	5.25	18.20	3352.243	3352.665	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-21D	10/27/10	Bailer	No	27.71	34.36	3352.010	3352.390	29 - 34	X	--	--	--	--	--	--	X	X	X
P2RI-21D	03/09/11	Bailer	No	31.56	34.12	3352.010	3352.390	29 - 34	X	X	--	--	--	--	--	X	X	X
P2RI-21D	06/10/11	Pump/Bailer	No	17.57	34.31	3352.010	3352.390	29 - 34	X	X	--	--	--	--	--	X	X	X
P2RI-21D	09/14/11	Bailer	No	30.70	34.31	3352.010	3352.390	29 - 34	X	X	--	--	--	--	--	--	X	--
P2RI-22S	01/27/10	Pump	No	9.60	19.20	3349.980	3350.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-22S	06/24/10	Pump	Yes - BD	2.82	19.38	3349.980	3350.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-22S Dup	06/24/10	Pump	NA	2.82	19.38	3349.980	3350.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-22S	09/22/10	Bailer	No	5.52	19.21	3349.980	3350.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-22S	10/26/10	Pump	No	7.83	19.42	3349.980	3350.300	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-22D	01/27/10	Bailer	No	49.80	54.60	3349.700	3350.190	50 - 55	X	X	X	X	X	X	X	X	X	X
P2RI-22D	06/24/10	Pump	No	39.92	54.54	3349.700	3350.190	50 - 55	X	X	X	X	X	X	X	--	X	X
P2RI-22D	09/22/10	Bailer	No	22.46	55.06	3349.700	3350.190	50 - 55	X	X	X	X	X	X	X	X	X	X
P2RI-22D	10/26/10	Bailer	No	24.46	55.02	3349.700	3350.190	50 - 55	X	X	X	X	X	X	X	X	X	X
P2RI-22D	06/09/11	Pump	No	19.38	54.55	3349.700	3350.190	50 - 55	X	X	X	X	X	X	X	X	X	X
P2RI-22D	09/15/11	Pump	No	26.00	54.52	3349.700	3350.190	50 - 55	X	X	X	X	X	X	X	X	X	X
P2RI-23S	01/27/10	Bailer	No	19.98	22.30	3350.030	3350.510	17 - 22	X	X	--	X	X	X	X	X	X	X
P2RI-23S	06/23/10	Pump	No	8.38	21.61	3350.030	3350.510	17 - 22	X	X	X	X	X	X	X	--	X	X
P2RI-23S	09/22/10	Pump	No	7.25	21.57	3350.030	3350.510	17 - 22	X	X	X	X	X	X	X	--	X	X
P2RI-23S	10/27/10	Bailer	No	7.63	21.60	3350.030	3350.510	17 - 22	X	X	X	X	X	X	X	--	X	X
P2RI-23D	11/11/10	Pump	No	10.60	25.04	3350.051	3350.656	20.8 - 25.8	X	X	X	X	X	X	X	--	X	X
P2RI-23D	03/15/11	Pump	No	10.64	25.24	3350.051	3350.656	20.8 - 25.8	X	X	X	X	X	X	X	--	X	X
P2RI-23D	06/09/11	Pump	No	7.68	25.21	3350.051	3350.656	20.8 - 25.8	X	X	X	X	X	X	X	--	X	X
P2RI-23D	09/16/11	Pump	No	11.00	25.20	3350.051	3350.656	20.8 - 25.8	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-24S	10/25/10	NA	NA	DRY	9.24	3412.030	3412.470	4 - 9	--	--	--	--	--	--	--	--	--	--
P2RI-24S	06/10/11	NA	NA	9.22	9.23	3412.030	3412.470	4 - 9	--	--	--	--	--	--	--	--	--	--
P2RI-24S	09/14/11	NA	NA	DRY	9.23	3412.030	3412.470	4 - 9	--	--	--	--	--	--	--	--	--	--
P2RI-24S	12/09/11	NA	NA	DRY	9.23	3412.030	3412.470	4 - 9	--	--	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	Bailer	No	36.38	52.91	3412.429	3412.685	43 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-24D	03/10/11	Pump	No	36.57	52.92	3412.429	3412.685	43 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-24D	06/10/11	Pump	No	36.85	52.94	3412.429	3412.685	43 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-24D	09/16/11	Pump	No	36.42	52.92	3412.429	3412.685	43 - 53	X	X	X	X	X	X	X	--	X	X
P2RI-25S	01/27/10	Pump	No	8.32	18.50	3367.950	3368.440	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-25S	06/24/10	Pump	No	6.06	18.65	3367.950	3368.440	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-25S	09/22/10	Bailer	No	5.56	18.55	3367.950	3368.440	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-25S	10/28/10	Pump	No	6.23	18.67	3367.950	3368.440	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-25D	11/11/10	Pump	Yes - BD	6.21	21.52	3368.418	3368.663	17.5 - 22.5	X	X	X	X	X	X	X	X	X	X
P2RI-25D Dup	11/11/10	Pump	NA	6.21	21.52	3368.418	3368.663	17.5 - 22.5	X	X	X	X	X	X	X	X	X	X
P2RI-25D	03/16/11	Pump	Yes - BD	7.77	21.50	3368.418	3368.663	17.5 - 22.5	X	X	X	X	X	X	X	X	X	X
P2RI-25D Dup	03/16/11	Pump	NA	7.77	21.50	3368.418	3368.663	17.5 - 22.5	X	X	X	X	X	X	X	X	X	X
P2RI-25D	06/11/11	Pump	No	5.99	21.90	3368.418	3368.663	17.5 - 22.5	X	X	X	X	X	X	X	X	X	X
P2RI-25D [b]	06/24/11					3368.418	3368.663	17.5 - 22.5	X	--	--	--	--	--	--	--	--	--
P2RI-25D [b]	07/22/11					3368.418	3368.663	17.5 - 22.5	X	--	--	--	--	--	--	--	--	--
P2RI-25D	09/19/11	Pump	No	5.93	22.11	3368.418	3368.663	17.5 - 22.5	X	X	X	X	X	X	X	X	X	X
P2RI-26S	10/22/10	Bailer	Yes - BD	12.35	20.33	3374.049	3371.748	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-26S Dup	10/22/10	Bailer	NA	12.35	20.33	3374.049	3371.748	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-26S	03/16/11	Pump	No	11.99	20.34	3374.049	3371.748	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-26S	06/14/11	Pump	No	11.59	20.15	3374.049	3371.748	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-26S	09/20/11	Pump	No	12.37	20.18	3374.049	3371.748	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-26D	11/12/10	Pump	Yes - MS/MSD	13.43	29.54	3374.451	3372.056	21 - 26	X	X	X	X	X	X	X	X	X	X
P2RI-26D	03/16/11	Pump	Yes - BD	14.12	29.18	3374.451	3372.056	21 - 26	X	X	X	X	X	X	X	X	X	X
P2RI-26D Dup	03/16/11	Pump	NA	14.12	29.18	3374.451	3372.056	21 - 26	X	X	X	X	X	X	X	X	X	X
P2RI-26D	06/14/11	Pump	No	12.08	28.67	3374.451	3372.056	21 - 26	X	X	X	X	X	X	X	X	X	X
P2RI-26D	09/20/11	Pump	No	12.19	28.62	3374.451	3372.056	21 - 26	X	X	X	X	X	X	X	X	X	X
P2RI-27S	03/10/11	Bailer	No	11.58	13.22	3426.154	3426.465	10.5 - 15.5	X	X	--	X	X	X	X	--	X	X
P2RI-27S	06/14/11	Bailer	No	11.20	13.92	3426.154	3426.465	10.5 - 15.5	X	X	X	X	X	X	X	--	X	X
P2RI-27S [b]	06/24/11					3426.154	3426.465	10.5 - 15.5	X	--	--	--	--	--	--	--	--	--
P2RI-27S [b]	07/22/11					3426.154	3426.465	10.5 - 15.5	X	--	--	--	--	--	--	--	--	--
P2RI-27S	09/14/11	Bailer	No	11.29	13.94	3426.154	3426.465	10.5 - 15.5	X	X	X	X	X	X	X	--	X	X
P2RI-27S	12/07/11	Pump	No	11.97	13.95	3426.154	3426.465	10.5 - 15.5	X	X	X	X	X	X	X	--	X	X
P2RI-27D	06/28/11	Bailer	No	55.98	63.63	3426.315	3426.688	54 - 64	X	X	X	X	X	X	X	X	X	X
P2RI-27D	09/14/11	Bailer	No	48.97	63.60	3426.315	3426.688	54 - 64	X	X	X	X	X	X	X	--	X	X
P2RI-27D	12/07/11	Bailer	No	49.03	63.60	3426.315	3426.688	54 - 64	X	X	X	X	X	X	X	--	X	X
P2RI-27D	03/20/12	Pump	No	48.50	63.63	3426.315	3426.688	54 - 64	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-27DF	06/09/11	NA	NA	DRY	98.42	3426.439	3426.785	79 - 99	--	--	--	--	--	--	--	--	--	--
P2RI-27DF	09/14/11	NA	NA	DRY	98.42	3426.439	3426.785	79 - 99	--	--	--	--	--	--	--	--	--	--
P2RI-27DF	12/01/11	NA	NA	DRY	98.51	3426.439	3426.785	79 - 99	--	--	--	--	--	--	--	--	--	--
P2RI-27DF	03/20/12	NA	NA	DRY	98.51	3426.439	3426.785	79 - 99	--	--	--	--	--	--	--	--	--	--
P2RI-28S	12/09/11	Bailer	No	14.21	14.85	3348.164	3345.070	7 - 12	X	X	--	--	--	--	--	--	X	--
P2RI-28S	03/21/12	Bailer	No	14.21	14.91	3348.164	3345.070	7 - 12	X	X	--	--	--	--	--	--	X	--
P2RI-28S	05/20/12	Bailer	No	13.90	14.85	3348.164	3345.070	7 - 12	X	X	X	--	--	--	--	--	X	--
P2RI-28S	09/12/12	Bailer	No	12.78	14.85	3348.164	3345.070	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-29S	12/09/11	Pump	No	7.55	20.31	3341.579	3338.710	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-29S	03/21/12	Pump	No	7.99	20.38	3341.579	3338.710	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-29S	05/18/12	Pump	No	6.60	20.53	3341.579	3338.710	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-29S	09/13/12	Pump	No	8.18	20.35	3341.579	3338.710	12.5 - 17.5	X	X	X	X	X	X	X	--	X	X
P2RI-30S	12/09/11	Pump	No	6.44	16.08	3338.449	3335.360	8 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-30S	03/21/12	Pump	No	6.15	13.10	3338.449	3335.360	8 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-30S	05/21/12	Pump	No	4.97	16.10	3338.449	3335.360	8 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-30S	09/13/12	Pump	No	7.94	16.10	3338.449	3335.360	9 - 13	X	X	X	X	X	X	X	X	X	X
P2RI-31S	12/10/11	Pump	No	8.63	15.27	3338.909	3335.640	7.5 - 12.5	X	X	X	X	X	X	X	X	X	X
P2RI-31S	03/22/12	Pump	No	8.86	15.34	3338.909	3335.640	7.5 - 12.5	X	X	X	X	X	X	X	X	X	X
P2RI-31S	05/21/12	Pump	No	7.84	15.28	3338.909	3335.640	7.5 - 12.5	X	X	X	X	X	X	X	X	X	X
P2RI-31S	09/14/12	Pump	No	7.78	15.30	3338.909	3335.640	7.5 - 12.6	X	X	X	X	X	X	X	X	X	X
P2RI-32S	12/09/11	Bailer	No	12.44	13.19	3330.964	3327.430	5 - 10	X	--	--	--	--	--	--	--	X	--
P2RI-32S	03/21/12	Bailer	No	12.16	13.20	3330.964	3327.430	5 - 10	X	X	--	--	--	--	--	--	X	--
P2RI-32S	05/20/12	Bailer	No	11.66	13.15	3330.964	3327.430	5 - 10	X	X	X	--	--	--	--	--	X	--
P2RI-32S	09/12/12	Bailer	No	8.38	13.15	3330.964	3327.430	5 - 10	X	X	X	X	X	X	X	X	X	X
P2RI-33S	06/13/11	Bailer	No	19.89	25.37	3351.331	3347.791	16 - 21	X	X	X	X	X	X	X	--	X	X
P2RI-33S	09/16/11	Bailer	No	21.07	25.35	3351.331	3347.791	16 - 21	X	X	X	X	X	X	X	--	X	X
P2RI-33S	12/07/11	Bailer	No	23.02	25.37	3351.331	3347.791	16 - 21	X	X	X	X	X	X	X	--	X	X
P2RI-33S	03/20/12	Bailer	No	23.88	25.35	3351.331	3347.791	16 - 21	X	X	X	--	--	--	--	--	X	X
P2RI-33D	11/04/10	Pump	No	26.45	50.86	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-33D	03/17/11	Pump	Yes - BD	25.56	53.50	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-33D Dup	03/17/11	Pump	NA	25.56	53.50	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-33D	06/13/11	Pump	Yes - BD	25.85	50.36	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-33D Dup	06/13/11	Pump	NA	25.85	50.36	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-33D	09/16/11	Pump	Yes - BD	26.25	50.25	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-33D Dup	09/16/11	Pump	NA	26.25	50.25	3351.006	3347.713	41.5 - 46.5	X	X	X	X	X	X	X	--	X	X
P2RI-34S	06/10/11	NA	NA	DRY	26.06	3391.168	3387.994	17.5 - 22.5	--	--	--	--	--	--	--	--	--	--
P2RI-34S	09/14/11	NA	NA	25.95	26.05	3391.168	3387.994	17.5 - 22.5	--	--	--	--	--	--	--	--	--	--
P2RI-34S	12/09/11	NA	NA	25.95	26.06	3391.168	3387.994	17.5 - 22.5	--	--	--	--	--	--	--	--	--	--
P2RI-34S	03/21/12	NA	NA	25.94	26.05	3391.168	3387.994	17.5 - 22.5	--	--	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	Pump	No	44.05	51.00	3391.001	3387.806	37 - 47	X	X	X	X	X	X	X	--	X	X
P2RI-34D	03/11/11	Pump	No	44.36	50.80	3391.001	3387.806	37 - 47	X	X	X	X	X	X	X	--	X	X
P2RI-34D	06/11/11	Pump	No	44.22	50.36	3391.001	3387.806	37 - 47	X	X	X	X	X	X	X	--	X	X
P2RI-34D	09/17/11	Pump	No	44.40	50.79	3391.001	3387.806	37 - 47	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-35S	11/03/10	Bailer	No	18.09	25.24	3434.866	3432.741	17.5 - 22.5	X	X	X	X	X	X	X	--	X	X
P2RI-35S	06/13/11	Pump	Yes - BD	18.29	25.30	3434.866	3432.741	17.5 - 22.5	X	X	X	X	X	X	X	--	X	X
P2RI-35S Dup	06/13/11	Pump	NA	18.29	25.30	3434.866	3432.741	17.5 - 22.5	X	X	X	X	X	X	X	--	X	X
P2RI-35S	09/15/11	Pump	No	17.43	25.30	3434.866	3432.741	17.5 - 22.5	X	X	X	X	X	X	X	--	X	X
P2RI-35S	12/07/11	Pump	No	17.20	25.34	3434.866	3432.741	17.5 - 22.5	X	X	X	X	X	X	X	--	X	X
P2RI-35D	06/09/11	NA	NA	DRY	103.36	3435.119	3432.323	90 - 100	--	--	--	--	--	--	--	--	--	--
P2RI-35D	09/13/11	NA	NA	103.17	103.34	3435.119	3432.323	90 - 100	--	--	--	--	--	--	--	--	--	--
P2RI-35D	12/01/11	NA	NA	103.19	103.34	3435.119	3432.323	90 - 100	--	--	--	--	--	--	--	--	--	--
P2RI-35D	03/20/12	NA	NA	103.16	103.34	3435.119	3432.323	90 - 100	--	--	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	Bailer	No	16.01	27.21	3456.084	3453.437	19 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-36S	03/14/11	Pump	No	16.09	27.22	3456.084	3453.437	19 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-36S	06/09/11	Pump	No	15.98	27.27	3456.084	3453.437	19 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-36S	09/15/11	Pump	No	15.34	27.24	3456.084	3453.437	19 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-36DF	03/14/11	NA	NA	124.55	124.95	3455.745	3452.932	112 - 122	--	--	--	--	--	--	--	--	--	--
P2RI-36DF	06/09/11	NA	NA	124.84	124.88	3455.745	3452.932	112 - 122	--	--	--	--	--	--	--	--	--	--
P2RI-36DF	09/13/11	NA	NA	124.74	124.84	3455.745	3452.932	112 - 122	--	--	--	--	--	--	--	--	--	--
P2RI-36DF	12/01/11	NA	NA	DRY	124.80	3455.745	3452.932	112 - 122	--	--	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	Bailer	No	20.10	23.40	3343.484	3340.295	15 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-37S	03/17/11	Pump	No	19.76	23.41	3343.484	3340.295	15 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-37S	06/13/11	Pump	No	19.55	23.41	3343.484	3340.295	15 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-37S	09/16/11	Pump	No	19.12	23.30	3343.484	3340.295	15 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-37D	06/27/11	Pump	No	19.43	51.95	3343.253	3340.290	39 - 49	X	X	X	X	X	X	X	--	X	X
P2RI-37D	09/16/11	Pump	No	19.23	51.77	3343.253	3340.290	39 - 49	X	X	X	X	X	X	X	--	X	X
P2RI-37D	12/07/11	Pump	Yes - BD	18.56	51.78	3343.253	3340.290	39 - 49	X	X	X	X	X	X	X	--	X	X
P2RI-37D Dup	12/07/11	Pump	NA	18.56	51.78	3343.253	3340.290	39 - 49	X	X	X	X	X	X	X	--	X	X
P2RI-37D	03/20/12	Pump	Yes - BD	17.61	51.80	3343.253	3340.290	39 - 49	X	X	X	X	X	X	X	--	X	X
P2RI-37D Dup	03/20/12	Pump	NA	17.61	51.80	3343.253	3340.290	39 - 49	X	X	X	X	X	X	X	--	X	X
P2RI-38S	06/08/11	NA	NA	DRY	17.75	3409.886	3406.913	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-38S	09/13/11	NA	NA	DRY	17.78	3409.886	3406.913	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-38S	12/01/11	NA	NA	DRY	17.75	3409.886	3406.913	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-38S	03/20/12	NA	NA	DRY	17.75	3409.886	3406.913	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-39S	06/08/11	NA	NA	DRY	18.42	3450.570	3447.881	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-39S	09/13/11	NA	NA	DRY	18.42	3450.570	3447.881	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-39S	12/01/11	NA	NA	DRY	18.42	3450.570	3447.881	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-39S	03/20/12	NA	NA	DRY	18.42	3450.570	3447.881	10 - 15	--	--	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	Pump	No	15.27	20.16	3418.199	3415.376	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-40S	03/10/11	Pump	No	15.28	20.35	3418.199	3415.376	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-40S	06/08/11	Pump	No	13.98	20.16	3418.199	3415.376	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-40S	09/15/11	Pump	No	15.39	21.71	3418.199	3415.376	14 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-41S	11/15/10	Bailer	No	19.83	20.36	3388.578	3385.350	12 - 17	X	--	--	--	--	--	--	--	X	--
P2RI-41S	03/11/11	Bailer	No	19.74	20.30	3388.578	3385.350	12 - 17	X	--	--	--	--	--	--	--	X	--
P2RI-41S	06/11/11	NA	NA	20.20	20.37	3388.578	3385.350	12 - 17	--	--	--	--	--	--	--	--	--	--
P2RI-41S	09/14/11	NA	NA	20.25	20.35	3388.578	3385.350	12 - 17	--	--	--	--	--	--	--	--	--	--
P2RI-41S	12/09/11	NA	NA	20.25	20.35	3388.578	3385.350	12 - 17	--	--	--	--	--	--	--	--	--	--

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-41D	11/05/10	Bailer	No	54.41	68.00	3388.670	3385.973	59.5 - 64.5	X	X	X	X	X	X	X	--	X	X
P2RI-41D	03/11/11	Pump	No	54.21	67.35	3388.670	3385.973	59.5 - 64.5	X	X	X	X	X	X	X	--	X	X
P2RI-41D	06/11/11	Pump	No	53.88	67.21	3388.670	3385.973	59.5 - 64.5	X	X	X	X	X	X	X	--	X	X
P2RI-41D	09/17/11	Pump	No	53.73	67.39	3388.670	3385.973	59.5 - 64.5	X	X	X	X	X	X	X	--	X	X
P2RI-43S	11/03/10	Bailer	No	25.47	36.30	3448.128	3445.171	22 - 32	X	X	X	X	X	X	X	X	X	X
P2RI-43S	03/16/11	Bailer	No	24.10	36.02	3448.128	3445.171	22 - 32	X	X	X	X	X	X	X	X	X	X
P2RI-43S	06/11/11	Pump	No	24.47	35.89	3448.128	3445.171	22 - 32	X	X	X	X	X	X	X	X	X	X
P2RI-43S	09/19/11	Pump	No	24.81	35.90	3448.128	3445.171	22 - 32	X	X	X	X	X	X	X	X	X	X
P2RI-43D	03/30/11	Pump	No	30.60	68.05	3448.263	3445.192	54 - 64	X	X	X	X	X	X	X	--	X	X
P2RI-43D	06/11/11	Pump	No	29.88	68.29	3448.263	3445.192	54 - 64	X	X	X	X	X	X	X	--	X	X
P2RI-43D	09/19/11	Pump	No	30.76	68.25	3448.263	3445.192	54 - 64	X	X	X	X	X	X	X	--	X	X
P2RI-43D	12/09/11	Pump	No	30.67	68.84	3448.263	3445.192	54 - 64	X	X	X	X	X	X	X	--	X	X
P2RI-44S	11/05/10	NA	NA	DRY	26.31	3409.652	3406.666	18 - 23	--	--	--	--	--	--	--	--	--	--
P2RI-44S	03/10/11	NA	NA	DRY	26.50	3409.652	3406.666	18 - 23	--	--	--	--	--	--	--	--	--	--
P2RI-44SR	06/10/11	Pump	Yes - BD	29.41	32.07	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44SR Dup	06/10/11	Pump	NA	29.41	32.07	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44SR	09/16/11	Pump	Yes - BD	29.01	32.06	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44SR Dup	09/16/11	Pump	NA	29.01	32.06	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44SR	12/06/11	Pump	No	28.98	31.96	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44SR	03/20/12	Pump	Yes - BD	29.87	31.89	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44SR Dup	03/20/12	Pump	NA	29.87	31.89	3410.850	3407.976	25 - 30	X	X	X	X	X	X	X	--	X	X
P2RI-44D	03/10/11	Pump	No	38.95	95.60	3410.707	3407.476	79 - 94	X	X	X	X	X	X	X	--	X	X
P2RI-44D	06/10/11	Pump	No	32.73	94.27	3410.707	3407.476	79 - 94	X	X	X	X	X	X	X	--	X	X
P2RI-44D	09/16/11	Pump	No	62.20	95.30	3410.707	3407.476	79 - 94	X	X	X	X	X	X	X	--	X	X
P2RI-44D	12/06/11	Pump	No	82.01	95.73	3410.707	3407.476	79 - 94	X	X	X	X	X	X	X	--	X	X
P2RI-45S	11/03/10	Bailer	No	12.76	19.12	3443.576	3440.658	6 - 16	X	X	X	X	X	X	X	X	X	X
P2RI-45S	03/16/11	Pump	Yes - BD	11.67	19.13	3443.576	3440.658	6 - 16	X	X	X	X	X	X	X	X	X	X
P2RI-45S Dup	03/16/11	Pump	NA	11.67	19.13	3443.576	3440.658	6 - 16	X	X	X	X	X	X	X	X	X	X
P2RI-45S	06/11/11	Pump	No	12.35	19.14	3443.576	3440.658	6 - 16	X	X	X	X	X	X	X	X	X	X
P2RI-45S	09/19/11	Pump	No	11.50	19.13	3443.576	3440.658	6 - 16	X	X	X	X	X	X	X	X	X	X
P2RI-45D	06/28/11	Bailer	No	37.48	41.53	3443.921	3440.950	29 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-45D	09/19/11	Pump	No	31.91	41.51	3443.921	3440.950	29 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-45D	12/09/11	Pump	No	19.75	41.51	3443.921	3440.950	29 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-45D	03/22/12	Pump	No	15.69	41.51	3443.921	3440.950	29 - 39	X	X	X	X	X	X	X	--	X	X
P2RI-46S	11/03/10	Bailer	No	16.93	22.50	3448.586	3445.509	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-46S	03/15/11	Bailer	No	16.81	22.27	3448.586	3445.509	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-46S	06/11/11	Pump	No	16.79	22.25	3448.586	3445.509	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-46S	09/19/11	Pump	No	14.75	22.27	3448.586	3445.509	14 - 19	X	X	X	X	X	X	X	X	X	X
P2RI-46D	12/16/10	Bailer	No	69.76	71.31	3448.922	3445.813	58 - 68	X	X	--	--	--	--	--	--	X	--
P2RI-46D	03/15/11	Bailer	No	69.67	71.31	3448.922	3445.813	58 - 68	X	--	--	--	--	--	--	--	X	--
P2RI-46D	06/11/11	Bailer	No	69.78	71.34	3448.922	3445.813	58 - 68	X	--	--	--	--	--	--	--	X	--
P2RI-46D	09/19/11	Bailer	No	70.23	71.23	3448.922	3445.813	58 - 68	X	--	--	--	--	--	--	--	X	--

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed										
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-46DFL	12/16/10	Bailer	No	119.98	122.79	3448.923	3445.932	109 - 119	X	X	X	X	X	X	X	X	X	X
P2RI-46DFL	03/15/11	Bailer	No	120.45	122.81	3448.923	3445.932	109 - 119	X	X	--	--	--	--	--	--	X	X
P2RI-46DFL	06/13/11	Bailer	No	120.94	122.87	3448.923	3445.932	109 - 119	X	X	--	--	--	--	--	--	X	X
P2RI-46DFL	09/19/11	Bailer	No	121.00	122.82	3448.923	3445.932	109 - 119	X	X	X	--	--	--	--	--	X	--
P2RI-46DFU	06/28/11	Bailer	No	91.30	92.02	3449.444	3446.316	84 - 94	X	X	--	--	--	--	--	X	X	X
P2RI-46DFU	09/19/11	Bailer	No	91.61	96.67	3449.444	3446.316	84 - 94	X	X	X	--	--	--	--	X	X	X
P2RI-46DFU	12/09/11	Bailer	No	90.21	96.49	3449.444	3446.316	84 - 94	X	X	X	X	X	X	X	X	X	X
P2RI-46DFU	03/21/12	Bailer	No	94.60	96.96	3449.444	3446.316	84 - 94	X	X	X	--	--	--	--	--	X	--
P2RI-47S	11/05/10	Bailer	No	24.75	27.90	3423.901	3421.140	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-47S	03/17/11	Bailer	No	16.02	27.91	3423.901	3421.140	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-47S	06/14/11	Pump	No	16.52	27.90	3423.901	3421.140	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-47S	09/20/11	Pump	No	14.92	27.90	3423.901	3421.140	20 - 25	X	X	X	X	X	X	X	--	X	X
P2RI-47DF	03/17/11	NA	NA	99.69	100.43	3423.853	3421.135	88 - 98	--	--	--	--	--	--	--	--	--	--
P2RI-47DF	06/14/11	Bailer	No	100.08	100.52	3423.853	3421.135	88 - 98	X	X	--	--	--	--	--	--	X	--
P2RI-47DF	09/20/11	Bailer	No	100.06	100.45	3423.853	3421.135	88 - 98	X	--	--	--	--	--	--	--	X	--
P2RI-47DF	12/09/11	NA	NA	100.14	100.45	3423.853	3421.135	88 - 98	--	--	--	--	--	--	--	--	--	--
P2RI-47DF	03/21/12	NA	NA	100.21	100.43	3423.853	3421.135	88 - 98	--	--	--	--	--	--	--	--	--	--
P2RI-48S	11/03/10	Bailer	No	9.86	15.35	3325.434	3323.167	7.5 - 12.5	X	--	--	X	X	X	X	--	X	X
P2RI-48S	03/15/11	Bailer	No	5.36	15.28	3325.434	3323.167	7.5 - 12.5	X	X	X	X	X	X	X	--	X	X
P2RI-48S	06/14/11	Pump	No	3.74	15.25	3325.434	3323.167	7.5 - 12.5	X	X	X	X	X	X	X	--	X	X
P2RI-48S	09/17/11	Pump	No	3.96	15.18	3325.434	3323.167	7.5 - 12.5	X	X	X	X	X	X	X	--	X	X
P2RI-49S	11/05/10	Bailer	No	10.71	16.50	3333.042	3329.871	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-49S	12/09/10	Pump	No	10.49	16.31	3333.042	3329.871	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-49S	03/11/11	Bailer	No	10.60	16.50	3333.042	3329.871	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-49S	06/14/11	Pump	No	10.05	16.31	3333.042	3329.871	8 - 13	X	X	X	X	X	X	X	--	X	X
P2RI-50S	12/09/10	Pump	No	22.68	27.34	3456.903	3453.893	14 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-50S	03/15/11	Pump	No	23.06	27.36	3456.903	3453.893	14 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-50S	06/11/11	Pump	No	23.16	27.27	3456.903	3453.893	14 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-50S	09/16/11	Pump	No	21.15	27.28	3456.903	3453.893	14 - 24	X	X	X	X	X	X	X	X	X	X
P2RI-50S	05/21/12	Pump	No	21.59	27.27	3456.903	3453.893	14 - 24	X	X	X	X	X	X	X	--	X	X
P2RI-51S	12/16/10	Bailer	No	7.00	9.80	3366.741	3367.197	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-51S	03/10/11	Bailer	No	7.70	9.62	3366.741	3367.197	5 - 10	X	--	--	--	--	--	--	--	X	--
P2RI-51S	06/09/11	Pump	No	4.42	9.81	3366.741	3367.197	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-51S	09/12/11	Pump	No	5.16	9.80	3366.741	3367.197	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-51S	12/03/11	Pump	No	6.42	9.65	3366.741	3367.197	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-51S	03/17/12	Pump	No	6.83	9.82	3366.741	3367.197	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-51S	05/17/12	Pump	No	4.51	9.81	3366.741	3367.197	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-52S	06/28/11	Bailer	No	26.87	27.38	3494.790	3491.904	10 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-52S	09/14/11	Bailer	No	26.91	27.35	3494.790	3491.904	10 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-52S	12/08/11	Bailer	No	26.94	27.37	3494.790	3491.904	10 - 25	X	--	--	--	--	--	--	--	X	--
P2RI-52S	03/21/12	Bailer	No	26.93	27.37	3494.790	3491.904	10 - 25	X	--	--	--	--	--	--	--	X	--

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-52DF	06/28/11	Bailer	No	157.46	160.08	3494.462	3491.825	128 - 158	X	X	X	X	X	X	X	--	X	X
P2RI-52DF	09/14/11	Bailer	No	158.66	161.13	3494.462	3491.825	128 - 158	X	X	X	--	--	--	--	--	X	--
P2RI-52DF	12/08/11	Bailer	No	158.94	161.01	3494.462	3491.825	128 - 158	X	X	--	--	--	--	--	--	X	--
P2RI-52DF	03/21/12	Bailer	No	159.33	161.21	3494.462	3491.825	128 - 158	X	X	--	--	--	--	--	--	X	--
P2RI-53S	06/15/11	Pump	No	3.48	18.21	3323.803	3320.654	5 - 15	X	X	X	X	X	X	X	X	X	X
P2RI-53S	09/16/11	Pump	Yes - BD	4.98	18.12	3323.803	3320.654	5 - 15	X	X	X	X	X	X	X	X	X	X
P2RI-53S Dup	09/16/11	Pump	NA	4.98	18.12	3323.803	3320.654	5 - 15	X	X	X	X	X	X	X	X	X	X
P2RI-53S	12/08/11	Pump	Yes - BD	5.97	18.21	3323.803	3320.654	5 - 15	X	X	X	X	X	X	X	X	X	X
P2RI-53S Dup	12/08/11	Pump	NA	5.97	18.21	3323.803	3320.654	5 - 15	X	X	X	X	X	X	X	X	X	X
P2RI-53S	03/22/12	Pump	Yes - MS/MSD	5.67	18.21	3323.803	3320.654	5 - 15	X	X	X	X	X	X	X	X	X	X
P2RI-54SU	06/15/11	Pump	No	3.85	20.32	3323.288	3320.393	7 - 17	X	X	X	X	X	X	X	--	X	X
P2RI-54SU	09/16/11	Pump	No	3.94	19.75	3323.288	3320.393	7 - 17	X	X	X	X	X	X	X	--	X	X
P2RI-54SU	12/08/11	Pump	No	5.64	19.73	3323.288	3320.393	7 - 17	X	X	X	X	X	X	X	--	X	X
P2RI-54SU	03/20/12	Pump	No	5.04	19.75	3323.288	3320.393	7 - 17	X	X	X	X	X	X	X	--	X	X
P2RI-54SM	06/15/11	Pump	No	1.00	74.80	3323.228	3320.519	54 - 69	X	X	X	X	X	X	X	--	X	X
P2RI-54SM	09/16/11	Pump	Yes - MS/MSD	0.60	72.22	3323.228	3320.519	54 - 69	X	X	X	X	X	X	X	--	X	X
P2RI-54SM	03/20/12	Pump	No	1.00	71.91	3323.228	3320.519	54 - 69	X	X	X	X	X	X	X	--	X	X
P2RI-54SM	05/20/12	Pump	Yes - BD	1.07	72.12	3323.228	3320.519	54 - 69	X	X	X	X	X	X	X	--	X	X
P2RI-54SM Dup	05/20/12	Pump	NA	1.07	72.12	3323.228	3320.519	54 - 69	X	X	X	X	X	X	X	--	X	X
P2RI-54SL	06/27/11	Pump	No	1.27	105.50	3323.262	3320.632	93.5 - 103.5	X	X	X	X	X	X	X	--	X	X
P2RI-54SL	09/16/11	Pump	No	0.24	--	3323.262	3320.632	93.5 - 103.5	X	X	X	X	X	X	X	--	X	X
P2RI-54SL	03/20/12	Pump	Yes - MS/MSD	2.08	107.40	3323.262	3320.632	93.5 - 103.5	X	X	X	X	X	X	X	--	X	X
P2RI-54SL	05/20/12	Pump	Yes - MS/MSD	0.91	107.80	3323.262	3320.632	93.5 - 103.5	X	X	X	X	X	X	X	--	X	X
P2RI-55S	12/07/11	Bailer	No	34.75	36.10	3469.002	3465.790	23 - 33	X	X	X	--	--	--	--	--	X	X
P2RI-55S	03/20/12	Bailer	No	31.72	36.10	3469.002	3465.790	23 - 33	X	X	X	X	X	X	X	--	X	X
P2RI-55S	05/20/12	Bailer	No	31.98	36.11	3469.002	3465.790	23 - 33	X	X	X	X	X	X	X	--	X	X
P2RI-55S	09/12/12	Bailer	No	31.75	36.09	3469.002	3465.790	23 - 33	X	X	X	X	X	X	X	--	X	X
P2RI-55DF	11/30/11	NA	NA	142.51	142.71	3469.024	3465.910	105 - 140	--	--	--	--	--	--	--	--	--	--
P2RI-55DF	12/07/11	NA	NA	142.62	142.71	3469.024	3465.910	105 - 140	--	--	--	--	--	--	--	--	--	--
P2RI-55DF	03/15/12	NA	NA	142.55	142.68	3469.024	3465.910	105 - 140	--	--	--	--	--	--	--	--	--	--
P2RI-55DF	05/15/12	NA	NA	142.58	142.71	3469.024	3465.910	105 - 140	--	--	--	--	--	--	--	--	--	--
P2RI-55DF	09/14/12	NA	NA	142.52	142.69	3469.024	3465.910	105 - 140	--	--	--	--	--	--	--	--	--	--
P2RI-55DF	12/05/12	NA	NA	Dry	142.69	3469.024	3465.910	105 - 140	--	--	--	--	--	--	--	--	--	--
P2RI-56S	12/09/11	Bailer	No	24.50	24.72	3417.586	3414.660	17 - 22	X	--	--	--	--	--	--	--	--	--
P2RI-56S	03/15/12	NA	NA	24.62	24.71	3417.586	3414.660	17 - 22	--	--	--	--	--	--	--	--	--	--
P2RI-56S	05/16/12	NA	NA	24.61	24.70	3417.586	3414.660	17 - 22	--	--	--	--	--	--	--	--	--	--
P2RI-56S	09/14/12	NA	NA	24.63	24.72	3417.586	3414.660	17 - 22	--	--	--	--	--	--	--	--	--	--
P2RI-56S	12/05/12	NA	NA	24.66	24.73	3417.586	3414.660	17 - 22	--	--	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	Pump/Bailer	No	83.88	91.06	3417.541	3414.490	58 - 88	X	X	X	X	X	X	X	X	X	X
P2RI-56DF	03/22/12	Pump	No	49.02	91.10	3417.541	3414.490	58 - 88	X	X	X	X	X	X	X	X	X	X
P2RI-56DF	05/21/12	Pump	No	42.89	91.03	3417.541	3414.490	58 - 88	X	X	X	X	X	X	X	--	X	X
P2RI-56DF	09/14/12	Pump	No	41.58	91.02	3417.541	3414.490	58 - 88	X	X	X	X	X	X	X	--	X	X
P2RI-56DF	12/06/12	Pump	No	44.31	91.11	3417.541	3414.490	58 - 88	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

								Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
P2RI-57S	12/07/11	Pump	No	8.50	13.15	3334.400	3330.830	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-57S	03/20/12	Pump	No	9.04	13.20	3334.400	3330.830	5 - 10	X	X	X	--	--	--	--	--	X	X
P2RI-57S	05/20/12	Pump	No	9.34	13.14	3334.400	3330.830	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-57S	09/20/12	Pump	No	10.24	13.15	3334.400	3330.830	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-58S	12/08/11	Pump	No	7.57	19.09	3329.679	3326.270	11 - 16	X	X	X	X	X	X	X	--	X	X
P2RI-58S	03/20/12	Pump	No	8.19	19.07	3329.679	3326.270	11 - 16	X	X	X	X	X	X	X	--	X	X
P2RI-58S	05/20/12	Pump	No	8.40	19.06	3329.679	3326.270	11 - 16	X	X	X	X	X	X	X	--	X	X
P2RI-58S	09/12/12	Pump	Yes - BD	6.97	19.10	3329.679	3326.270	11 - 16	X	X	X	X	X	X	X	--	X	X
P2RI-58S Dup	09/12/12	Pump	NA	6.97	19.10	3329.679	3326.270	11 - 16	X	X	X	X	X	X	X	--	X	X
P2RI-59S	12/08/11	Pump	No	6.40	17.10	3327.386	3324.210	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-59S	03/20/12	Pump	No	7.09	17.10	3327.386	3324.210	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-59S	05/21/12	Pump	Yes - BD	6.84	17.10	3327.386	3324.210	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-59S Dup	05/21/12	Pump	NA	6.84	17.10	3327.386	3324.210	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-59S	09/12/12	Pump	Yes - BD	5.38	17.10	3327.386	3324.210	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-59S Dup	09/12/12	Pump	NA	5.38	17.10	3327.386	3324.210	9 - 14	X	X	X	X	X	X	X	--	X	X
P2RI-60S	12/07/11	Pump	Yes - BD	5.09	23.10	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-60S Dup	12/07/11	Pump	NA	5.09	23.10	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-60S	03/21/12	Pump	Yes - BD	4.65	23.10	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-60S Dup	03/21/12	Pump	NA	4.65	23.10	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-60S	05/21/12	Pump	Yes - BD	3.71	23.10	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-60S Dup	05/21/12	Pump	NA	3.71	23.10	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-60S	09/13/12	Pump	Yes - MS/MSD	4.25	23.05	3322.544	3319.430	10 - 20	X	X	X	X	X	X	X	--	X	X
P2RI-61S	12/08/11	Pump	No	5.65	15.09	3323.179	3320.030	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-61S	03/21/12	Pump	Yes - BD	5.43	15.09	3323.179	3320.030	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-61S Dup	03/21/12	Pump	NA	5.43	15.09	3323.179	3320.030	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-61S	05/21/12	Pump	No	4.33	15.09	3323.179	3320.030	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-61S	09/12/12	Pump	No	4.87	15.10	3323.179	3320.030	7 - 12	X	X	X	X	X	X	X	--	X	X
P2RI-62S	12/08/11	Bailer	No	5.70	13.03	3325.218	3322.040	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-62S	03/22/12	Pump	No	4.40	13.03	3325.218	3322.040	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-62S	05/21/12	Pump	No	4.00	13.03	3325.218	3322.040	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-62S	09/13/12	Pump	No	5.14	13.00	3325.218	3322.040	5 - 10	X	X	X	X	X	X	X	--	X	X
P2RI-63S	12/08/11	Bailer	No	20.27	22.21	3324.021	3320.880	9 - 19	X	X	X	--	--	--	--	--	X	X
P2RI-63S	03/21/12	Bailer	No	19.39	22.21	3324.021	3320.880	9 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-63S	05/20/12	Bailer	No	17.94	22.21	3324.021	3320.880	9 - 19	X	X	X	X	X	X	X	--	X	X
P2RI-63S	09/12/12	Bailer	No	12.95	22.20	3324.021	3320.880	9 - 19	X	X	X	X	X	X	X	--	X	X
GW-A	03/09/11	Bailer	No	64.07	68.40	3432.782	3429.786	55 - 65	X	X	X	X	X	X	X	X	X	X
GW-A	06/27/11	Bailer	No	65.13	68.15	3432.782	3429.786	55 - 65	X	X	X	X	X	X	--	X	X	X
GW-A	09/13/11	Bailer	No	66.07	68.35	3432.782	3429.786	55 - 65	X	X	X	--	--	--	--	X	X	X
GW-A	12/06/11	Bailer	No	65.25	68.20	3432.782	3429.786	55 - 65	X	X	X	X	X	X	--	--	X	X
GW-C-24	03/09/11	Pump	No	38.76	48.50	3449.910	3446.931	35 - 45	X	X	X	X	X	X	X	--	X	X
GW-C-24	06/07/11	Pump	No	31.95	48.51	3449.910	3446.931	35 - 45	X	X	X	X	X	X	X	--	X	X
GW-C-24	09/14/11	Pump	No	30.86	48.49	3449.910	3446.931	35 - 45	X	X	X	X	X	X	X	--	X	X
GW-C-24	12/06/11	Pump	No	29.08	48.30	3449.910	3446.931	35 - 45	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
GW-C-25	06/07/11	Bailer	No	43.43	46.60	3449.285	3446.013	33 - 43	X	X	X	X	X	X	--	--	X	X
GW-C-25	09/12/11	Bailer	No	41.20	46.58	3449.285	3446.013	33 - 43	X	X	X	X	X	X	X	--	X	X
GW-C-25	12/05/11	Bailer	No	41.50	46.60	3449.285	3446.013	33 - 43	X	X	X	X	X	X	X	--	X	X
GW-C-25	03/19/12	Bailer	No	40.13	46.58	3449.285	3446.013	33 - 43	X	X	X	X	X	X	X	--	X	X
GW-C-29	10/21/10	Bailer	No	17.09	23.86	3451.766	3449.207	16 - 21	X	X	X	X	X	X	X	--	X	X
GW-C-29	03/14/11	Pump	No	17.96	23.27	3451.766	3449.207	16 - 21	X	X	X	X	X	X	X	--	X	X
GW-C-29	06/08/11	Pump	Yes - MS/MSD	17.70	23.27	3451.766	3449.207	16 - 21	X	X	X	X	X	X	X	X	X	X
GW-C-29	09/15/11	Pump	Yes - BD	17.60	23.60	3451.766	3449.207	16 - 21	X	X	X	X	X	X	X	--	X	X
GW-C-29 Dup	09/15/11	Pump	NA	17.60	23.60	3451.766	3449.207	16 - 21	X	X	X	X	X	X	X	--	X	X
GW-C-45	11/03/10	Bailer	No	20.61	29.50	3446.747	3444.284	16 - 26	X	X	X	X	X	X	X	--	X	X
GW-C-45	03/09/11	Bailer	No	21.53	29.02	3446.747	3444.284	16 - 26	X	X	X	X	X	X	X	--	X	X
GW-C-45	06/08/11	Pump	No	22.09	29.02	3446.747	3444.284	16 - 26	X	X	X	X	X	X	X	--	X	X
GW-C-45	09/14/11	Pump	No	21.34	29.04	3446.747	3444.284	16 - 26	X	X	X	X	X	X	X	--	X	X
GW-C-46S	03/09/11	Pump	Yes - BD	24.12	31.95	3461.147	3458.399	19 - 29	X	X	X	X	X	X	X	--	X	X
GW-C-46S Dup	03/09/11	Pump	NA	24.12	31.95	3461.147	3458.399	19 - 29	X	X	X	X	X	X	X	--	X	X
GW-C-46S	06/08/11	Pump	No	24.32	31.95	3461.147	3458.399	19 - 29	X	X	X	X	X	X	X	--	X	X
GW-C-46S	09/14/11	Pump	No	24.23	31.95	3461.147	3458.399	19 - 29	X	X	X	X	X	X	X	--	X	X
GW-C-46S [a]	09/21/11					3461.147	3458.399	19 - 29	--	--	--	--	--	--	--	--	--	--
GW-C-46S	12/06/11	Pump	No	23.96	31.96	3461.147	3458.399	19 - 29	X	X	X	X	X	X	X	--	X	X
GW-C-46DF	03/09/11	Bailer	No	122.74	127.62	3461.133	3458.194	115 - 125	X	X	X	X	X	X	X	X	X	X
GW-C-46DF	09/13/11	Bailer	No	127.64	129.04	3461.133	3458.194	115 - 125	X	X	--	--	--	--	--	--	X	--
GW-C-46DF	12/06/11	Bailer	No	128.22	129.08	3461.133	3458.194	115 - 125	X	--	--	--	--	--	--	--	X	--
GW-C-46DF	03/19/12	Bailer	No	128.30	129.06	3461.133	3458.194	115 - 125	X	--	--	--	--	--	--	--	X	--
GW-C-47S	11/03/10	Bailer	No	14.82	23.34	3446.234	3443.214	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-C-47S	03/14/11	Pump	No	15.78	33.37	3446.234	3443.214	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-C-47S	06/08/11	Pump	No	16.10	23.37	3446.234	3443.214	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-C-47S	12/06/11	Pump	No	14.11	23.50	3446.234	3443.214	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-C-47DF	03/12/11	Bailer	No	92.11	95.11	3446.389	3443.100	80 - 90	X	X	--	--	--	--	--	--	X	--
GW-C-47DF	12/06/11	Bailer	No	89.08	89.70	3446.389	3443.100	80 - 90	X	--	--	--	--	--	--	--	X	--
GW-C-47DF	03/21/12	Bailer	No	88.24	89.52	3446.389	3443.100	80 - 90	X	X	X	--	--	--	--	--	X	--
GW-C-47DF	05/20/12	Bailer	No	88.26	89.42	3446.389	3443.100	80 - 90	X	X	X	--	--	--	--	--	X	--
GW-C-48	03/11/11	Pump	Yes - BD	25.38	35.34	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	X	X	X
GW-C-48 Dup	03/11/11	Pump	NA	25.38	35.34	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	--	X	X
GW-C-48	06/11/11	Pump	Yes - BD	25.34	35.19	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	--	X	X
GW-C-48 Dup	06/11/11	Pump	NA	25.34	35.19	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	--	X	X
GW-C-48	09/15/11	Pump	No	24.88	35.37	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	--	X	X
GW-C-48	12/06/11	Pump	Yes - BD	24.82	35.20	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	--	X	X
GW-C-48 Dup	12/06/11	Pump	NA	24.82	35.20	3417.155	3413.812	22 - 32	X	X	X	X	X	X	X	--	X	X
GW-CS	03/11/11	Bailer	No	16.04	19.30	3452.245	3452.427	14 - 19	X	X	--	X	X	X	--	--	X	X
GW-CS	06/08/11	Bailer	No	14.30	19.22	3452.245	3452.427	14 - 19	X	X	X	X	X	X	X	--	X	X
GW-CS	09/14/11	Pump	No	15.04	19.19	3452.245	3452.427	14 - 19	X	X	X	X	X	X	X	--	X	X
GW-CS [a]	09/21/11					3452.245	3452.427	14 - 19	--	--	--	--	--	--	--	--	--	--
GW-CS Dup [a]	09/21/11					3452.245	3452.427	14 - 19	--	--	--	--	--	--	--	--	--	--
GW-CS	12/06/11	Pump	No	15.31	19.21	3452.245	3452.427	14 - 19	X	X	X	--	--	--	--	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
GW-CD [a]	09/21/11					3455.725	3453.101	60 - 70	--	--	--	--	--	--	--	--	--	--
GW-CD	12/05/11	Bailer	No	72.10	72.95	3455.725	3453.101	60 - 70	X	--	--	--	--	--	--	--	X	--
GW-CD	03/19/12	Bailer	No	71.91	72.47	3455.725	3453.101	60 - 70	X	X	--	--	--	--	--	--	X	--
GW-CD	05/20/12	Bailer	No	72.18	72.94	3455.725	3453.101	60 - 70	X	--	--	--	--	--	--	--	X	--
GW-CDF	06/08/11	NA	NA	117.45	117.52	3455.822	3453.372	105 - 115	--	--	--	--	--	--	--	--	--	--
GW-CDF	09/12/11	NA	NA	DRY	117.43	3455.822	3453.372	105 - 115	--	--	--	--	--	--	--	--	--	--
GW-CDF	12/01/11	NA	NA	DRY	117.52	3455.822	3453.372	105 - 115	--	--	--	--	--	--	--	--	--	--
GW-CDF	03/19/12	NA	NA	DRY	117.44	3455.822	3453.372	105 - 115	--	--	--	--	--	--	--	--	--	--
GW-D	06/07/11	NA	NA	58.45	58.48	3469.071	3465.936	45 - 55	--	--	--	--	--	--	--	--	--	--
GW-D	09/12/11	NA	NA	58.41	58.48	3469.071	3465.936	45 - 55	--	--	--	--	--	--	--	--	--	--
GW-D	12/01/11	NA	NA	58.42	58.49	3469.071	3465.936	45 - 55	--	--	--	--	--	--	--	--	--	--
GW-D	03/20/12	NA	NA	58.41	58.49	3469.071	3465.936	45 - 55	--	--	--	--	--	--	--	--	--	--
GW-ES	12/15/10	Pump	Yes - BD	16.36	22.55	3401.115	3398.350	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-ES Dup	12/15/10	Pump	NA	16.36	22.55	3401.115	3398.350	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-ES	03/15/11	Bailer	No	17.42	22.50	3401.115	3398.350	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-ES	06/08/11	Pump	No	16.34	22.56	3401.115	3398.350	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-ES	09/15/11	Pump	No	14.95	22.55	3401.115	3398.350	10 - 20	X	X	X	X	X	X	X	X	X	X
GW-ED	12/17/10	Bailer	No	63.40	66.44	3401.239	3398.621	58 - 68	X	X	X	--	--	--	--	X	X	X
GW-ED	03/15/11	Bailer	No	48.87	65.68	3401.239	3398.621	58 - 68	X	X	--	--	--	--	--	X	X	X
GW-ED	06/08/11	Bailer	No	47.89	65.81	3401.239	3398.621	58 - 68	X	X	X	X	X	X	X	--	X	X
GW-ED	09/15/11	Pump/Bailer	No	45.51	65.81	3401.239	3398.621	58 - 68	X	X	X	X	X	X	X	X	X	X
GW-FS	10/21/10	Bailer	No	15.38	20.34	3380.297	3377.623	12 - 17	X	X	X	X	X	X	X	--	X	X
GW-FS	03/08/11	Pump	No	15.62	20.31	3380.297	3377.623	12 - 17	X	X	X	X	X	X	X	--	X	X
GW-FS	06/07/11	Pump	No	14.06	20.32	3380.297	3377.623	12 - 17	X	X	X	X	X	X	X	--	X	X
GW-FS	09/13/11	Pump	No	14.47	20.30	3380.297	3377.623	12 - 17	X	X	X	X	X	X	X	--	X	X
GW-GS	10/22/10	Bailer	Yes - MS/MSD	8.95	13.13	3362.925	3363.314	8 - 13	X	X	X	X	X	X	X	--	X	X
GW-GS	03/08/11	Pump	Yes - MS/MSD	6.86	13.33	3362.925	3363.314	8 - 13	X	X	X	X	X	X	X	--	X	X
GW-GS	06/07/11	Pump	No	6.10	13.32	3362.925	3363.314	8 - 13	X	X	X	X	X	X	X	--	X	X
GW-GS	09/13/11	Pump	No	6.20	13.30	3362.925	3363.314	8 - 13	X	X	X	X	X	X	X	--	X	X
GW-H	11/16/10	Bailer	No	37.33	37.99	3468.139	3465.223	25 - 35	X	--	--	--	--	--	--	--	X	--
GW-H	03/09/11	Bailer	No	32.80	38.20	3468.139	3465.223	25 - 35	X	X	X	X	X	X	X	--	X	X
GW-H	06/27/11	Bailer	No	32.82	38.00	3468.139	3465.223	25 - 35	X	X	X	X	X	X	X	--	X	X
GW-H	09/12/11	Bailer	No	32.81	38.19	3468.139	3465.223	25 - 35	X	X	X	X	X	X	X	--	X	X
GW-H [a]	09/21/11					3468.139	3465.223	25 - 35	--	--	--	--	--	--	--	--	--	--
GW-K	06/07/11	Bailer	No	47.81	48.46	3453.755	3450.764	35 - 45	X	--	--	--	--	--	--	--	X	--
GW-K	09/12/11	Bailer	No	46.33	48.45	3453.755	3450.764	35 - 45	X	X	--	--	--	--	--	X	X	X
GW-K	12/06/11	Bailer	No	46.20	49.00	3453.755	3450.764	35 - 45	X	X	--	--	--	--	--	--	X	--
GW-K	03/19/12	Bailer	No	45.93	48.45	3453.755	3450.764	35 - 45	X	X	--	--	--	--	--	--	X	--
GW-L	06/07/11	Pump	No	27.51	34.19	3410.821	3411.150	25 - 32	X	X	X	X	X	X	X	--	X	X
GW-L	09/13/11	Pump	No	27.33	34.20	3410.821	3411.150	25 - 32	X	X	X	X	X	X	X	--	X	X
GW-L	12/06/11	Pump	No	27.10	34.20	3410.821	3411.150	25 - 32	X	X	X	X	X	X	X	--	X	X
GW-L	03/19/12	Pump	No	27.26	34.20	3410.821	3411.150	25 - 32	X	X	X	X	X	X	X	--	X	X

TABLE 4.3-2. SAMPLING EVENT SUMMARY, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

									Analyses Performed									
Location ID	Date Sampled	Sampling Method	Blind Duplicate or MS/MSD	Depth to Water (ft bmp)	Total Depth (ft bmp)	Measuring Point Elevation (ft msl)	Ground Surface Elevation (ft msl)	Screened Interval (ft bgs)	SW 8260B	SW 8270C	8270C-SIM	6020	SW 6010B	SW 7470A	SW 9012A	MA-EPH	MA-VPH	MT EPH Screen
GW-MS	10/21/10	Bailer	No	12.07	21.11	3444.866	3442.304	13 - 18	X	X	X	X	X	X	X	--	X	X
GW-MS	03/14/11	Pump	Yes - BD	13.60	21.03	3444.866	3442.304	13 - 18	X	X	X	X	X	X	X	--	X	X
GW-MS Dup	03/14/11	Pump	NA	13.60	21.03	3444.866	3442.304	13 - 18	X	X	X	X	X	X	X	--	X	X
GW-MS	06/08/11	Pump	No	13.81	21.03	3444.866	3442.304	13 - 18	X	X	X	X	X	X	X	--	X	X
GW-MS	09/15/11	Pump	No	12.80	21.03	3444.866	3442.304	13 - 18	X	X	X	X	X	X	X	--	X	X
GW-MDF	03/12/11	Bailer	No	110.73	117.91	3445.067	3442.456	105 - 115	X	--	--	--	--	--	--	--	X	--
GW-MDF	06/08/11	Bailer	No	112.39	117.91	3445.067	3442.456	105 - 115	X	X	--	--	--	--	--	X	X	X
GW-MDF	09/13/11	Bailer	No	116.62	119.09	3445.067	3442.456	105 - 115	X	X	--	--	--	--	--	--	X	--
GW-MDF	12/06/11	Bailer	No	117.29	119.10	3445.067	3442.456	105 - 115	X	X	--	--	--	--	--	--	X	--
GW-NS	12/17/10	Bailer	No	6.81	9.09	3380.338	3380.574	5 - 10	X	X	X	X	X	X	X	--	X	X
GW-NS	03/15/11	Bailer	No	7.68	9.10	3380.338	3380.574	5 - 10	X	X	--	--	--	--	--	--	X	X
GW-NS	06/07/11	Bailer	No	4.92	9.34	3380.338	3380.574	5 - 10	X	X	X	X	X	X	X	--	X	X
GW-NS [b]	06/24/11					3380.338	3380.574	5 - 10	X	--	--	--	--	--	--	--	--	--
GW-NS [b]	07/22/11					3380.338	3380.574	5 - 10	X	--	--	--	--	--	--	--	--	--
GW-NS	09/14/11	Bailer	No	7.41	9.43	3380.338	3380.574	5 - 10	X	X	X	--	--	--	--	--	X	--
GW-NS	12/05/11	Bailer	No	6.95	9.50	3380.338	3380.574	5 - 10	X	X	X	X	X	X	X	--	X	X
GW-NS	03/19/12	Bailer	No	7.45	9.52	3380.338	3380.574	5 - 10	X	X	X	X	X	X	X	--	X	X
GW-NS	05/20/12	Bailer	No	5.79	9.52	3380.338	3380.574	5 - 10	X	X	X	X	X	X	X	--	X	X
GW-ND	12/15/10	Pump	Yes - MS/MSD	5.44	24.88	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	--	X	X
GW-ND	03/15/11	Pump	No	7.25	24.73	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	--	X	X
GW-ND	06/07/11	Pump	No	5.25	24.80	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	X	X	X
GW-ND	09/14/11	Pump	No	4.93	24.80	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	--	X	X
GW-ND	12/06/11	Pump	No	5.66	25.15	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	--	X	X
GW-ND	03/19/12	Pump	No	6.54	25.15	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	--	X	X
GW-ND	05/18/12	Pump	No	6.48	25.15	3380.486	3380.760	20 - 25	X	X	X	X	X	X	X	--	X	X
PA-5R	12/10/11	Pump	No	7.51	15.31	3327.956	3324.580	7 - 12	X	X	X	X	X	X	X	--	X	X
PA-5R	03/22/12	Pump	No	6.77	15.38	3327.956	3324.580	7 - 12	X	X	X	X	X	X	X	--	X	X
PA-5R	05/21/12	Pump	No	5.35	15.32	3327.956	3324.580	7 - 12	X	X	X	X	X	X	X	--	X	X
PA-5R	09/14/12	Pump	No	4.32	15.30	3327.956	3324.580	7 - 12	X	X	X	X	X	X	X	--	X	X

Notes:
ft-bgs - feet below ground surface
ft-bmp - feet below measuring point
ft-msl - feet above mean sea level
NA - not applicable
BD - sample for blind duplicate collected from well
MS/MSD - sample for matrix spike/matrix spike duplicate collected from well
-- - analyses not performed
[a] = drinking water investigation sampling event
[b] = PC Primer flush/purge sample event
[1] - well P2RI-18 plugged and abandoned September 2010

TABLE 4.3-3. ANALYTICAL RESULTS, PVC PRIMER IMPACTS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Date Sampled	Acetone, TIC[2] (mg/L)	Cyclohexanone, TIC[2] (mg/L)	Methyl ethyl ketone (2-Butanone)[1] (mg/L)	Tetrahydrofuran, TIC[2] (mg/L)
P2RI-16D	03/10/2011	NM	NM	ND	NM
P2RI-16D	06/11/2011	NM	NM	0.17	NM
P2RI-16D	06/24/2011	--	--	0.13	--
P2RI-16D	07/22/2011	--	--	0.59	0.023
P2RI-16D	09/17/2011	NM	NM	ND	NM
P2RI-16D	12/08/2011	NM	NM	ND	NM
P2RI-18SR	03/30/2011	NM	NM	ND	NM
P2RI-18SR	06/10/2011	1.8	--	100	3.5
P2RI-18SR	06/24/2011	0.007	--	0.59	0.039
P2RI-18SR	07/22/2011	--	--	0.27	0.027
P2RI-18SR	09/17/2011	NM	NM	ND	NM
P2RI-25D	03/16/2011	NM	NM	ND	NM
P2RI-25D	06/11/2011	NM	NM	0.045	NM
P2RI-25D	06/24/2011	0.003	--	0.48	0.013
P2RI-25D	07/22/2011	--	--	0.41	0.013
P2RI-25D	09/19/2011	NM	NM	ND	NM
P2RI-27S	03/10/2011	--	--	ND	--
P2RI-27S	06/14/2011	0.061	--	0.76	0.72
P2RI-27S	06/24/2011	--	--	ND	0.025
P2RI-27S	07/22/2011	--	--	0.14	0.043
P2RI-27S	09/14/2011	--	--	ND	--
P2RI-27S	12/07/2011	--	--	ND	--
GW-NS	03/15/2011	NM	NM	ND	NM
GW-NS	06/07/2011	0.048	--	1.1	0.4
GW-NS	06/24/2011	--	--	0.029	0.11
GW-NS	07/22/2011	--	--	ND	0.043
GW-NS	09/14/2011	NM	NM	ND	NM
GW-NS	12/05/2011	NM	NM	ND	NM
Groundwater RBSLs and Standards (mg/L):		NA	13	4.9	NA

Notes:

[1] - Result is from laboratory analytical method SW 8260B

[2] - Result is an approximation from laboratory mass spectrometry

mg/L - milligrams per liter

NM - TIC result not requested

ND - Not detected

Sample was taken during the flushing/purging events

TIC - Tentatively identified compound

-- - Not detected/identified during the TIC mass spectrometry

RBSL - Risk Based Screening Level

NA - RBSL not available

TABLE 4.5-1. FLUID LEVEL COMMUNICATION TESTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

		Test Date:	3/5/2011	
GW-ND		Pump Rate	GW-NS	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
0849	7.33	0.18	Initial	7.68
0854	7.33	0.18		
0857	7.33	0.18		
0900	7.33	0.18		
0905	7.32	0.14		
0907	7.32	0.14		
0910	7.32	0.14	0909	7.63
0914	7.31	0.14	0922	7.65
0917	7.31	0.14		
0919	7.31	0.14		
0921	7.31	0.14		

		Test Date:	3/10/2011	
P2RI-16S		Pump Rate	P2RI-16D	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
1031	3.80	0.20	Initial	5.57
1035	3.73	--		
1038	3.75	--		
1041	3.75	--	During	5.56
1043	3.75	--		
1047	3.75	--		
1052	--	--	Final	5.54
1056	3.77	--		
1102	--	--		

		Test Date:	3/11/2011	
P2RI-19D		Pump Rate	P2RI-19S	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
0845	--	0.17	Initial	7.99
0849	--	--		
0852	--	--	During	--
0857	6.83	--		
0903	--	--		
0907	--	--	Final	8.02
0912	6.94	--		

TABLE 4.5-1. FLUID LEVEL COMMUNICATION TESTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

		Test Date:	3/15/2011	
P2RI-23D		Pump Rate	P2RI-23S	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
1140	10.83	0.38	1140	8.78
1145	10.93	--	1145	8.78
1150	11.02	--	1150	8.76
1155	11.06	--	1155	8.76
1200	11.05	--	1200	8.77
			1220	8.76

		Test Date:	3/16/2011	
P2RI-25D		Pump Rate	P2RI-25S	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
0959	7.79	0.20	Initial	7.08
1002	7.79	0.20		
1005	7.79	0.20	During	7.10
1009	7.80	0.20		
1014	7.80	0.20	Final	--
1017	7.80	0.20		

		Test Date:	3/16/2011	
P2RI-26D		Pump Rate	P2RI-26S	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
1349	14.12	0.25	Initial	11.98
1352	14.13	0.25		
1355	14.13	0.25	During	11.99
1358	14.14	0.25	Final	11.99

TABLE 4.5-1. FLUID LEVEL COMMUNICATION TESTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

		Test Date:	2/7/2011	
P2RI-26D		Pump Rate	P2RI-26S	
Time (elapsed)	DTW (ft)	Liters/min	Time (elapsed)	DTW (ft)
0	13.37	3.79	0	13.13
1	13.54	3.79	1	13.13
2	13.56	3.79	2	13.14
3	13.57	3.79	3	13.14
4	13.57	3.79	4	13.14
5	13.57	3.79	5	13.14
6	13.57	3.79	6	13.14
7	13.57	3.79	7	13.14
8	13.69	5.68	8	13.14
9	13.69	7.57	9	13.14
10	13.70	5.68	10	13.14
15	13.70	6.06	15	13.14
20	13.70	6.06	20	13.14
25	13.71	6.06	25	13.13
30	13.71	6.06	30	13.13
40	13.70	6.06	40	13.13
50	13.71	5.68	50	13.13
60	13.69	5.68	60	13.13

		Test Date:	2/17/2012	
P2RI-9D		Pump Rate	P2RI-9S	
Time	DTW (ft)	Liters/min	Time	DTW (ft)
1545	14.22	3.79	1545	13.06
1546	25.30	2.84	--	--
1547	28.85	2.84	1547	13.06
1549	35.60	1.89	1549	13.06
1550	NM	1.51	--	--
1551	39.00	1.89	1551	13.06
1552	41.50	2.27	--	--
1553	44.08	2.27	1553	13.06
1554	46.45	2.08	--	--
1555	49.15	2.84	1555	13.06
1557	Dry	2.84	1557	13.06

Notes:
DTW - Depth to water
ft - feet
Liters/min - liters per minute
NM - not measured
"--" - not available

TABLE 4.5-2. MONITORING WELLS BY GEOGRAPHIC AREA
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Network Area	Hydrostratigraphic Unit	Location	Unit Screened	Ground Surface (ft-msl)	Top of Screen (ft-bgs)	Bottom of Screen (ft-bgs)	Total Depth (ft-bgs)	Date Completed	MPE (ft-msl)	Easting (X)	Northing (Y)	Elevation of Screened Interval (top of sand pack to bottom of screen) (ft-msl)	Top of Weathered Shale Elevation (ft-msl)	Top of Competent Shale Elevation (ft-msl)	Overburden Type
Northeast Area	Alluvial Sediments	GW-4R	CLOVRB	3844.510	8.5	13.5	13.5	09/17/11	3347.549	1389318.538	1696249.598	3838.01 - 3331.01	3381.010	DNR	Clay Overburden
		GW-8RR	CLOVRB	3887.108	9	14	14	10/08/10	3390.140	1388342.550	1696558.498	3879.61 - 3373.11	3371.108	DNR	Clay Overburden
		GW-6R	CLOVRB	3392.430	9.5	19.5	20	11/19/98	3392.540	1388045.850	1697064.970	3384.93 - 3372.43	DNR	DNR	Clay Overburden
		GW-10	CLOVRB	3366.500	9.5	19.5	20	11/18/98	3368.710	1388817.520	1696501.940	3359.50 - 3346.50	DNR	DNR	Clay Overburden
		GW-12	CLOVRB	3417.030	14	34	34.5	11/17/98	3420.230	1387905.000	1696412.000	3405.53 - 3382.53	DNR	DNR	Clay Overburden
		GW-16R	CLOVRB	3883.655	4.5	9.5	9.5	10/11/10	3383.424	1388291.204	1696894.350	3880.66 - 3374.16	DNR	DNR	Clay Overburden
		GW-17R	CLOVRB	3866.140	7	12	12	09/17/11	3366.306	1388788.754	1696902.715	3861.14 - 3354.14	DNR	DNR	Clay Overburden
		GW-20RS	CLOVRB	3873.265	7	12	12	10/20/10	3372.962	1388425.076	1697200.810	3866.27 - 3361.27	DNR	DNR	Clay Overburden
		GW-25R	CLOVRB	3379.430	4	9	9	10/25/10	3379.112	1387806.666	1698007.156	3376.43 - 3370.43	DNR	DNR	Clay Overburden
		GW-30	CLOVRB	3374.960	10	25	25	02/28/06	3375.780	1388288.660	1697464.860	3366.96 - 3349.96	DNR	DNR	Clay Overburden
		GW-30R	CLOVRB	3376.061	4	9	9	10/25/10	3375.764	1388277.115	1697464.103	3373.06 - 3367.06	DNR	DNR	Clay Overburden
		GW-FS	CLOVRB	3377.623	12	17	17	09/28/10	3380.297	1388568.516	1696430.313	3366.62 - 3360.62	DNR	DNR	Clay Overburden
		GW-GS	CLOVRB	3363.314	8	13	13	09/29/10	3362.925	1388917.301	1696369.036	3355.81 - 3349.81	DNR	DNR	Clay Overburden
		GW-NS	CLOVRB	3380.574	5	10	10	12/04/10	3380.338	1388107.835	1697616.926	3376.57 - 3370.57	DNR	DNR	Clay Overburden
		LSSI-24	CLOVRB	3364.860	10	20	20	05/03/06	3365.600	1388831.900	1695925.690	3356.86 - 3344.86	DNR	DNR	Clay Overburden
		P2RI-18SR	CLOVRB	3374.437	7	12	12	10/11/10	3374.190	1388349.089	1697285.705	3369.44 - 3362.44	3859.437	DNR	Clay Overburden
		P2RI-19S	CLOVRB	3364.750	8	13	13	12/18/09	3364.340	1388803.611	1697148.151	3358.75 - 3351.75	3846.750	DNR	Clay Overburden
		P2RI-20	CLOVRB	3362.470	12.5	17.5	18	12/18/09	3361.850	1388811.409	1697391.959	3353.07 - 3344.47	3841.970	DNR	Clay Overburden
		P2RI-21S	CLOVRB	3952.665	14	19	19	10/11/10	3352.243	1389182.225	1697570.663	3940.67 - 3933.67	DNR	DNR	Clay Overburden
		P2RI-22S	CLOVRB	3850.300	14	19	19.5	12/17/09	3349.980	1389247.741	1697233.581	3839.30 - 3830.80	3329.800	DNR	Clay Overburden
		P2RI-23S	CLOVRB	3850.510	17	22	22	12/17/09	3350.030	1389238.011	1696654.561	3836.11 - 3828.51	3328.510	DNR	Clay Overburden
		P2RI-26S	CLOVRB	3871.748	12.5	17.5	17.5	10/08/10	3374.049	1388685.228	1696563.631	3360.75 - 3354.25	DNR	DNR	Clay Overburden
		P2RI-28S	CLOVRB	3345.070	7	12	12	09/17/11	3348.164	1389348.207	1696493.319	3340.07 - 3333.07	3832.570	DNR	Clay Overburden
		P2RI-51S	CLOVRB	3367.197	5	10	10	12/04/10	3366.741	1388817.001	1696719.650	3363.20 - 3357.20	DNR	DNR	Clay Overburden
		SDW-17D	OVRB	No Log	No Log	No Log	No Log	No Log	3374.330	1388379.286	1697121.048	UNKNOWN	No Log	No Log	Overburden
		SDW-17S	OVRB	No Log	No Log	No Log	No Log	No Log	3374.410	1388379.286	1697120.048	UNKNOWN	No Log	No Log	Overburden
	Weathered Shale	GW-3	CLOVRB-WS	3354.250	27	37	37	01/10/90	3355.600	1389218.924	1695161.723	3328.25 - 3317.25	3325.750	DNR	Clay Overburden
		GW-4	WS	3344.770	17	27	27	01/12/90	3346.310	1389324.310	1696249.410	3329.44 - 3317.77	3330.770	DNR	Clay Overburden
		GW-5R	CLOVRB-WS	3387.090	9.5	24.5	25	11/17/98	3389.460	1388341.180	1696548.800	3379.59 - 3362.09	3371.090	DNR	Clay Overburden
		GW-11	WS	3373.850	9.5	24.5	25	11/18/98	3375.750	1388692.390	1696114.340	3366.85 - 3348.85	DNR	DNR	Clay Overburden
		GW-13	DROVRB-WS	3400.160	6	31	31.75	11/10/99	3400.960	1388217.000	1695951.000	3396.16 - 3368.41	3390.160	DNR	Drift Overburden
		GW-14	CLOVRB-WS	3405.490	14.5	34.5	35	11/07/99	3404.930	1387833.297	1697104.783	3393.49 - 3370.49	3387.990	DNR	Clay Overburden
		GW-15	CLOVRB-WS	3376.830	9.5	29.5	30	11/08/99	3376.300	1388544.320	1696608.470	3369.43 - 3346.83	3356.830	DNR	Clay Overburden
		GW-16	CLOVRB-WS	3384.140	5.5	20.5	21	11/08/99	3383.590	1388292.550	1696888.070	3381.14 - 3363.14	3374.140	DNR	Clay Overburden
		GW-17	CLOVRB-WS	3366.660	9.5	29.5	30	11/08/99	3365.940	1388796.390	1696908.460	3359.16 - 3336.66	3349.160	DNR	Clay Overburden
		GW-18	DROVRB-WS	3402.180	7.5	27.5	28.25	11/10/99	3401.540	1388042.378	1696715.262	3397.43 - 3373.93	3392.180	DNR	Drift Overburden
		GW-19	CLOVRB-WS	3385.690	5	20	20.7	11/08/99	3384.970	1388184.440	1697067.590	3382.69 - 3364.99	3375.690	DNR	Clay Overburden
		GW-20	CLOVRB-WS	3373.620	5	20	20.75	11/09/99	3373.090	1388424.780	1697180.880	3370.62 - 3352.87	3361.120	DNR	Clay Overburden
		GW-20D	WS	3373.271	15	20	20	10/20/10	3372.873	1388424.856	1697210.918	3358.27 - 3353.27	3358.971	DNR	Clay Overburden
		GW-21	CLOVRB-WS	3388.190	5	25	25.5	11/09/99	3387.390	1388065.530	1697240.679	3385.19 - 3362.69	3375.690	DNR	Clay Overburden
		GW-22	CLOVRB-WS	3371.360	5	25	25.6	11/09/99	3370.740	1388436.940	1697477.260	3368.56 - 3345.76	3353.860	DNR	Clay Overburden
		GW-23	CLOVRB-WS	3387.120	5	25	25.5	11/10/99	3386.270	1387897.070	1697619.950	3384.12 - 3361.62	3379.620	DNR	Clay Overburden
		GW-24	CLOVRB-WS	3373.310	9.5	29.5	30	11/07/99	3372.410	1388300.230	1697677.240	3365.81 - 3343.31	3353.810	DNR	Clay Overburden
		GW-25	CLOVRB-WS	3379.420	5	25	25.5	02/02/00	3378.950	1387811.460	1698005.740	3375.42 - 3353.92	3366.920	DNR	Clay Overburden
		GW-26	CLOVRB-WS	3391.390	8	28	28.5	02/01/00	3390.810	1387630.030	1697724.320	3385.39 - 3362.89	3381.390	DNR	Clay Overburden
		GW-27	WS	3417.320	10	30	30.5	02/02/00	3417.000	1387512.251	1697140.543	3409.32 - 3386.82	3412.320	DNR	Clay Overburden
		GW-28	WS	3440.880	20	40	40.5	02/01/00	3442.340	1387432.990	1696570.940	3422.88 - 3400.38	3423.380	DNR	Clay Overburden
		GW-29	CLOVRB-WS	3413.910	17	37	37	02/27/06	3413.740	1387504.100	1697242.610	3398.91 - 3376.91	3397.910	DNR	Clay Overburden
		GW-31	DROVRB-WS	3379.640	12.5	34	34	03/31/07	3381.640	1388575.600	1696233.960	3369.14 - 3346.64	3350.640	DNR	Drift Overburden
		GW-ES	DROVRB-WS	3398.350	10	20	20	10/14/10	3401.115	1388199.054	1696336.229	3390.35 - 3378.35	3387.100	DNR	Drift Overburden
		GW-I	WS	3411.150	25	35	35	05/07/11	3410.821	1387507.351	1697304.751	3388.15 - 3376.15	3396.150	3350.150	Clay Overburden
		GW-ND	WS	3380.760	20	25	25	12/04/10	3380.486	1388101.008	1697617.665	3362.36 - 3355.76	3356.260	3340.760	Clay Overburden
		MWD-1	CLOVRB-WS	--	10.5	40.5	40.5	--	--	1388126.595	1696582.611	3427.23 - 3415.03	3436.034	DNR	Drift Overburden
		P2RI-12	DROVRB-WS	3412.870	7	12	14	01/19/10	3412.370	1387960.412	1696702.793	3407.97 - 3398.87	3402.370	DNR	Drift Overburden
		P2RI-13	CLOVRB-WS	3410.970	7	12	12	01/12/10	3410.880	1387968.953	1696477.605	3406.17 - 3398.97	3401.470	DNR	Clay Overburden
		P2RI-14	WS	3391.780	12	17	17	12/19/09	3391.180	1387953.256	1697291.326	3382.78 - 3374.78	3385.780	DNR	Clay Overburden
		P2RI-15	DROVRB-WS	3408.560	5	10	11	01/19/10	3408.000	1388048.200	1696333.554	3405.36 - 3397.56	3400.560	DNR	Drift Overburden
		P2RI-16S	CLOVRB-WS	3881.100	12.4	17.4	17.4	12/19/09	3380.680	1388413.150	1696720.592	3872.00 - 3363.70	3366.600	DNR	Clay Overburden
		P2RI-16D	WS	3381.585	14.5	19.5	19.5	10/27/10	3381.282	1388408.513	1696713.891	3367.09 - 3362.09	3367.085	DNR	Clay Overburden
		P2RI-17	CLOVRB-WS	3376.910	9	14	14	12/19/09	3376.470	1388421.313	1696944.254	3370.01 - 3362.91	3364.910	DNR	Clay Overburden
		P2RI-18	CLOVRB-WS	3374.600	10.5	15.5	17	12/21/09	3374.960	1388334.317	1697282.591	3366.10 - 3357.60	3359.600	DNR	Clay Overburden
		P2RI-18D	CLOVRB-WS	3375.481	14	19	19	10/11/10	3375.053	1388323.462	1697280.260	3361.48 - 3356.48	3360.481	DNR	Clay Overburden
		P2RI-19D	WS	3364.752	20	25	25	10/26/10	3364.453	1388800.951	1697163.242	3344.75 - 3339.75	3846.752	DNR	Clay Overburden
		P2RI-21D	WS	3352.890	29	34	34	12/18/09	3352.010	1389181.724	1697564.732	3325.89 - 3318.39	3928.390	DNR	Clay Overburden
		P2RI-22D	WS	3350.190	50	55	56	01/23/10	3349.700	1389254.022	1697233.285	3302.19 - 3294.19	3928.190	DNR	Clay Overburden
		P2RI-23D	WS	3350.656	20.8	25.8	25.8	10/26/10	3350.051	1389237.875	1696654.520	3329.86 - 3324.86	3380.656	DNR	Clay Overburden
		P2RI-25S	CLOVRB-WS	3368.440	14	19	20.2	12/19/09	3367.950	1388749.530	1696788.273	3356.64 - 3348.24	3353.440	DNR	Clay Overburden
		P2RI-25D	WS	3868.663	17.5	22.5	22.5	10/25/10	3368.418	1388748.725	1696781.436	3851.16 - 3346.16	3351.963	DNR	Clay Overburden
		P2RI-26D	WS	3872.056	21	26	26	10/26/10	3374.451	1388676.951	1696563.291	3851.06 - 3346.06	3352.056	DNR	Clay Overburden
		P2RI-27S	DROVRB-WS	3426.465	10.5	15.5	15.5	11/10/10	3426.154	1386889.173	1697270.532	3416.67 - 3410.97	3411.465	DNR	Drift Overburden
		PTA1	CLOVRB-WS	3392.970	11	25.5	26	02/28/06	3392.970	1387950.502	1697315.393	3347.05 - 3330.05	DNR	DNR	Clay Overburden
		PTA1-10	CLOVRB-WS	3391.070	9	28.7	29	09/26/06	3391.070	1387952.033	1697393.464	3384.07 - 3362.07	3382.070	DNR	Clay Overburden
		PTA1-20	CLOVRB-WS	3391.110	8	29.7	30	09/18/06	3391.110	1387959.804	1697375.775	3385.11 - 3361.11	3383.110	DNR	Clay Overburden
		PTA1-40	CLOVRB-WS	3392.730	9	28.7	29	09/18/06	3392.730	1387945.423	1697352.357	3385.73 - 3363.73	3380.730	DNR	Clay Overburden
		PTA1-5	CLOVRB-WS	3391.350	9	28.7	29	09/26/06	3391.350	1387941.824	1697389.203	3384.35 - 3362.35	3381.350	DNR	Clay Overburden
		PTA1-EXT	CLOVRB-WS	3391.000	9	28.7	29	09/19/06	3391.000	1387942.479	1697384.962	3384.00 - 3362.00	3366.000	DNR	Clay Overburden
		PTA3	CLOVRB-WS	3375.560	11	28.5	29	02/27/06	3375.560	1388681.774	1696263.287	3384.00 - 3362.00	3366.000	DNR	Clay Overburden
		PTA3-10	CLOVRB-WS	3376.600	11	33.7	34	09/16/06	3376.600	1388682.200	1696393.830	3367.60 - 3342.60	3355.600	DNR	Clay Overburden
		PTA3-20	CLOVRB-WS	3376.650	11	33.7	34	09/17/06	3376.650	1388683.850	1696371.320	3367.65 - 3342.65	3352.650	DNR	Clay Overburden
		PTA3-40	CLOVRB-WS	3377.160	11	33.7	34	09/16/06	3377.160	1388665.160	1696348.570	3368.16 - 3343.16	3355.160	DNR	Clay Overburden
		PTA3-5	CLOVRB-WS	3376.720	11	33.7	34	09/17/06	3376.720	1388674.810	1696393.440	3367.72 - 3342.72	3347.720	DNR	Clay Overburden
		PTA3-EXT	CLOVRB-WS	3376.790	12	31.7	32	09/23/06	3376.790	1388673.750	1696387.590	3366.79 - 3344.79	3355.790	DNR	Clay Overburden
		LSSI-23	DROVRB-WS	3367.300	10	20	20	05/03/06	3367.760	1388839.770	1696233.840	3359.30 - 3347.30	3355.300	DNR	Drift Overburden
		LSSI-39	DROVRB-WS	3374.950	14	34	34	04/01/07	3377.710	1388659.500	1696226.230	3362.95 - 3340.95	3352.950	DNR	Drift Overburden
		LSSI-40	CLOVRB-WS	3384.600	9	34	34	04/01/07	3386.763	1388459.515	1696240.061	3377.60 - 3350.60	3362.600	DNR	Clay Overburden
		LSSI-41	DROVRB-WS	3386.510	14	34	34	04/05/07	3387.630	1388455.740	1696109.580	3374.51 - 3352.51	3357.510	DNR	Drift Overburden
		LSSI-42	DROVRB-WS	3390.600	9	39	39	04/05/07	3391.770	1388341.000	1696251.000	3383.60 - 3351.60	3366.600	DNR	Drift Overburden
		LSSI-44	DROVRB-WS	3384.530	13.5	33.5	33.5	04/05/07	3386.210	1388449.010	1695872.410	3373.03 - 3351.03	3367.530	DNR	Drift Overburden
		SDW-3S	WS-COMP	3400.920	20	30	32	03/12/08	3400.650	1387823.980	1697207.520	3383.92 - 3368.92	3395.920	3378.920	Overburden
		SDW-7S	WS	3416.860	25	30	32	03/20/08	3416.670	1387939.970	1696784.930	3394.86 - 3384.86	3400.860	3383.860	Overburden
		SDW-10S	WS-COMP	3396.880	15	20	21	03/25/08	3396.580	1387664.710	1697504.850	3384.88 - 3375.88	3392.880	3380.880	Overburden
		SDW-11S	OVRB-WS	3368.930	14.5	24.5	25	03/25/08	3368.820	1388668.110	1696922.070	3357.93 - 3343.93	3353.930	3346.930	Overburden
		SDW-12S	WS	3387.320	11	16	16	03/26/08	3387.210	1387831.300	1697633.630	3378.32 - 3371.32	3378.320	3365.320	Overburden
		SDW-13S	WS	3379.030	9	19	20	03/27/08	3379.200	1387795.940	1698013.970	3372.03 - 3359.03	3373.030	3360.030	Overburden
		SDW-14S	WS	3388.460	9	14	15	03/31/08	3388.100	1387671.040	1697793.550	3380.46 - 3373.46	3385.460	3365.460	Overburden
	Competent Shale	GW-ED	COMP	3398.621	58	68	68	11/08/10	3401.239	1388193.664	1696329.408	3342.62 - 3330.62	3386.621	3348.621	Drift Overburden
		P2RI-27D	COMP	3426.688	54	64	64	05/10/11	3426.315	1386887.426	1697256.538	3374.69 - 3362.69	3411.688	3402.688	Drift Overburden
		P2RI-27DF	COMP	3426.785	79	99	99	05/09/11	3426.439	1386886.798	1697251.122	3349.79 - 3327.79	3411.785	3402.785	Drift Overburden
		SDW-3D	COMP	3400.920	55	60	63	03/12/08	3400.480	1387823.980	1697208.520	3346.92 - 3337.92	3395.920	3378.920	Overburden
		SDW-7D	COMP	3416.860	58	68	71	03/20/08	3416.600	1387939.970	1696785.930	3367.86 - 3345.86	3400.860	3383.860	Overburden
		SDW-8D	COMP	3406.680	55	60	61	03/21/08	3406.500	1387866.130	1696999.590	3353.68 - 3345.68	3406.680	3399.680	Overburden
		SDW-8S	COMP	3406.680	19	29	30	03/21/08	3406.620	1387866.130	1696998.590	3392.68 - 3376.68	3406.680	3399.680	Overburden
		SDW-9D	COMP	3406.500	60	70	80	03/25/08	3406.050	1387702.500	1697219.180	3347.50 - 3326.50	3398.500	3389.500	Overburden
		SDW-9S	COMP	3406.500	22	32	33	03/25/08	3406.100	1387702.500	1697218.180	3389.50 - 3373.50	3398.500	3389.500	Overburden
		SDW-10D	COMP	3396.880	41	51	57	03/25/08	3396.450	1387664.710	1697505.850	3358.88 - 3339.88	3392.880	3380.880	Overburden
		SDW-11D	COMP	3368.930	55	60	60	03/25/08	3368.720	1388668.110	1696923.070	3320.43 - 3308.93	3353.930	3346.930	Overburden
		SDW-12D	COMP	3387.320	59	64	66	03/26/08	3387.120	1387831.300	1697634.630	3330.32 - 3321.32	3378.320	3365.320	Overburden
		SDW-13D	COMP	3379.030	64	69	69	03/27/08	3379.110	1387795.940	1698014.970	3316.03 - 3310.03	3373.030	3360.030	Overburden
		SDW-14D	COMP	3388.460	65	75	80	03/31/08	3388.070	1387671.040	1697794.550	3329.46 - 3308.46	3385.460	3365.460	Overburden
		SDW-16D	COMP	3382.410	55	60	61	04/01/08	3382.310	1388166.000	1697275.540	3328.41 - 3321.41	3373.410	3368.410	Overburden
		SDW-16S	COMP	3382.410	34	44	45	04/01/08	3382.430	1388166.000	1697274.540	3361.41 - 3337.41	3373.410	3368.410	Overburden

TABLE 4.5-2. MONITORING WELLS BY GEOGRAPHIC AREA
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Network Area	Hydrostratigraphic Unit	Location	Unit Screened	Ground Surface (ft-msl)	Top of Screen (ft-bgs)	Bottom of Screen (ft-bgs)	Total Depth (ft-bgs)	Date Completed	MPE (ft-msl)	Easting (X)	Northing (Y)	Elevation of Screened Interval (top of sand pack to bottom of screen) (ft-msl)	Top of Weathered Shale Elevation (ft-msl)	Top of Competent Shale Elevation (ft-msl)	Overburden Type
Southeast Area	Alluvial Sediments	GW-9	CLOVRB	3345.480	28	38	38	02/21/90	3346.740	1389299.026	1689892.965	3319.48 - 3307.48	DNR	DNR	Clay Overburden
		P2RI-9S	CLOVRB	3348.300	14	19	21	12/20/09	3350.380	1389241.006	1695743.312	3336.30 - 3327.30	3325.300	DNR	Clay Overburden
		P2RI-29S	CLOVRB	3338.710	12.5	17.5	17.5	09/17/11	3341.579	1389390.393	1695862.109	3328.21 - 3321.21	DNR	DNR	Clay Overburden
		P2RI-30S	CLOVRB	3335.360	8	13	13	09/17/11	3338.449	1389372.811	1695446.743	3330.86 - 3322.36	DNR	DNR	Clay Overburden
		P2RI-31S	CLOVRB	3335.640	7.5	12.5	12.5	09/17/11	3338.909	1389282.453	1695185.700	3330.64 - 3323.14	DNR	DNR	Clay Overburden
		P2RI-32S	CLOVRB	3327.430	5	10	10	09/17/11	3330.964	1389299.169	1693752.398	3323.43 - 3317.43	DNR	DNR	Clay Overburden
		P2RI-38S	CLOVRB	3347.791	16	21	21	09/27/10	3351.331	1388778.468	1692987.352	3333.79 - 3326.79	DNR	DNR	Clay Overburden
		P2RI-37S	CLOVRB	3340.295	15	20	24	09/27/10	3343.484	1388967.262	1693719.545	3327.30 - 3316.30	DNR	DNR	Clay Overburden
		P2RI-48S	CLOVRB	3323.167	7.5	12.5	12.5	09/29/10	3325.434	1389716.700	1694082.431	3316.17 - 3310.67	DNR	DNR	Clay Overburden
		P2RI-49S	CLOVRB	3329.871	8	13	15.5	09/30/10	3333.042	1389645.469	1693196.091	3322.87 - 3314.37	DNR	DNR	Clay Overburden
		P2RI-63S	CLOVRB	3320.654	5	15	15	05/24/11	3323.803	1389996.846	1695186.625	3316.65 - 3305.65	DNR	DNR	Clay Overburden
		P2RI-54SU	CLOVRB	3320.393	7	17	17	05/24/11	3323.288	1389995.505	1694864.282	3313.79 - 3303.39	DNR	DNR	Clay Overburden
		P2RI-54SL	CLOVRB-WS	3320.632	93.5	103.5	103.5	05/22/11	3323.262	1390007.418	1694863.769	3232.63 - 3217.13	DNR	DNR	Clay Overburden
		P2RI-54SM	CLOVRB-WS	3320.519	54	69	69	05/20/11	3323.228	1390006.563	1694849.823	3267.52 - 3251.52	DNR	DNR	Clay Overburden
		P2RI-57S	CLOVRB	3330.830	5	10	10	09/17/11	3334.400	1389342.745	1692974.873	3326.83 - 3320.83	DNR	DNR	Clay Overburden
		P2RI-58S	CLOVRB	3326.270	11	16	16	09/17/11	3329.679	1389691.458	1693538.886	3317.27 - 3310.27	DNR	DNR	Clay Overburden
		P2RI-59S	CLOVRB	3324.210	9	14	14	09/17/11	3327.386	1389712.985	1693809.652	3317.21 - 3310.21	DNR	DNR	Clay Overburden
		P2RI-60S	CLOVRB	3319.430	10	20	20	09/17/11	3322.544	1390216.837	1695136.851	3311.33 - 3299.43	DNR	DNR	Clay Overburden
		P2RI-61S	CLOVRB	3320.030	7	12	12	09/17/11	3323.179	1390127.851	1695475.120	3315.03 - 3308.03	DNR	DNR	Clay Overburden
		P2RI-62S	CLOVRB	3322.040	5	10	10	11/04/11	3325.218	1389674.661	1695405.601	3318.04 - 3312.04	DNR	DNR	Clay Overburden
		P2RI-63S	CLOVRB	3320.880	9	19	19	11/04/11	3324.021	1390054.740	1694166.648	3313.88 - 3301.88	DNR	DNR	Clay Overburden
		PA-4	CLOVRB	3342.670	8	23	23	09/21/06	3344.790	1389019.390	1694336.760	3336.67 - 3319.67	DNR	DNR	Clay Overburden
		PA-5	CLOVRB	3325.850	10	20	20	09/24/06	3328.380	1389388.580	1694572.270	3317.85 - 3305.85	DNR	DNR	Clay Overburden
		PA-5R	CLOVRB	3324.580	7	12	12	09/17/11	3327.956	1389374.538	1694507.267	3319.58 - 3312.58	DNR	DNR	Clay Overburden
		PA-6	CLOVRB	3335.830	5	20	20	09/24/06	3338.600	1389396.150	1694919.040	3332.33 - 3315.83	DNR	DNR	Clay Overburden
		PA-9	CLOVRB	3354.050	9	24	24	04/03/07	3355.500	1389077.700	1695319.160	3347.05 - 3330.05	DNR	DNR	Clay Overburden
		VCP06-RW	CLOVRB	3827.450	5	15	20	09/17/11	3330.837	1390253.363	1693705.820	3889.50 - 3873.50	3398.500	3389.500	Overburden
	Weathered Shale	GW-2	CLOVRB-WS	3343.320	13	28	28	12/12/89	3345.590	1389073.173	1694390.012	3333.32 - 3315.32	3323.320	DNR	Clay Overburden
		LSSI-21	WS	3384.910	18	38	38	05/01/06	3387.460	1388523.190	1695477.320	3368.91 - 3346.91	3369.910	DNR	Drift Overburden
		LSSI-22	CLOVRB-WS	3378.910	15	35	35	05/01/06	3381.440	1388687.910	1695250.840	3365.91 - 3343.91	3354.410	DNR	Clay Overburden
		LSSI-25	CLOVRB-WS	3367.020	10	30	30	05/03/06	3367.680	1388829.570	1695591.770	3359.02 - 3337.02	3342.020	DNR	Clay Overburden
		LSSI-43	DROVRB-WS	3377.880	14	34	34	04/05/07	3378.710	1388650.970	1695696.870	3365.88 - 3343.88	3356.880	DNR	Drift Overburden
		P2RI-9D	WS-COMP	3348.340	48	63	53	01/24/10	3350.600	1389227.099	1695742.580	3302.34 - 3295.34	3323.840	3298.340	Clay Overburden
		P2RI-33D	WS	3347.713	41.5	46.5	46.5	10/07/10	3351.006	1388742.004	1692991.579	3307.11 - 3301.21	3321.713	DNR	Clay Overburden
		PA-1	CLOVRB-WS	3360.250	6	31	31	09/21/06	3363.130	1389048.900	1695189.060	3356.25 - 3329.25	3338.250	DNR	Clay Overburden
		PA-2	CLOVRB-WS	3362.890	10	25	25	09/20/06	3365.540	1388755.530	1694890.710	3354.89 - 3337.89	3345.890	DNR	Clay Overburden
		PA-3	CLOVRB-WS	3366.500	8	23	23	09/20/06	3367.820	1388756.020	1694554.000	3360.50 - 3343.50	3347.500	DNR	Clay Overburden
		PA-7	CLOVRB-WS	3365.740	14	34	34	04/03/07	3367.370	1388882.380	1695166.620	3353.74 - 3331.74	3332.740	DNR	Clay Overburden
		PA-8	CLOVRB-WS	3351.400	14	34	34	04/03/07	3353.100	1389214.910	1695213.840	3339.40 - 3317.40	3322.400	DNR	Clay Overburden
	Competent Shale	P2RI-37D	COMP	3340.285	39	49	49	05/09/11	3343.253	1388968.921	1693726.740	3303.29 - 3291.29	3312.785	3306.285	Clay Overburden
Southwest Area	Weathered Shale	P2RI-34S	CLOVRB-WS	3387.990	17.5	22.5	22.5	09/11/10	3391.168	1388057.359	1693168.311	3372.69 - 3365.49	3367.990	DNR	Clay Overburden
		P2RI-35S	WS	3432.741	17.5	22.5	22.5	09/11/10	3434.866	1386771.417	1693846.260	3417.34 - 3410.24	3429.241	DNR	Drift Overburden
		P2RI-36S	WS	3453.337	19	24	24	09/15/10	3456.094	1385796.953	1693600.136	3436.54 - 3429.44	3439.437	DNR	Drift Overburden
		P2RI-38S	DROVRB-WS	3406.913	10	15	15	09/11/10	3409.886	1387829.602	1693723.122	3398.91 - 3391.91	3393.413	DNR	Drift Overburden
		P2RI-39S	DROVRB-WS	3447.881	10	15	15	09/10/10	3450.970	1387360.306	1694132.781	3439.88 - 3432.88	3435.381	DNR	Drift Overburden
		P2RI-55S	WS-COMP	3465.790	23	33	35	11/16/11	3466.002	1386013.446	1693767.429	3445.79 - 3430.79	3452.790	3442.790	Drift Overburden
	Competent Shale	P2RI-34D	COMP	3387.806	37	47	47	09/26/10	3391.001	1388058.050	1693173.506	3352.81 - 3340.81	3367.806	3353.806	Clay Overburden
		P2RI-35D	COMP	3432.323	90	100	108	09/15/10	3435.119	1386776.237	1693545.107	3345.32 - 3329.32	3428.823	3406.323	Drift Overburden
		P2RI-36DF	COMP	3452.932	112	122	122	09/15/10	3455.745	1385797.291	1693610.876	3343.03 - 3330.93	3487.932	3416.932	Drift Overburden
		P2RI-55DF	COMP	3465.910	105	140	140	11/16/11	3469.024	1386067.036	1693767.350	3362.21 - 3325.91	3452.910	3442.910	Drift Overburden
		SDW-19D	COMP	3486.170	128.5	138.5	140	11/12/08	3487.910	1385297.695	1694334.035	3361.17 - 3346.17	3478.170	3471.670	Overburden
		SDW-19S	COMP	3486.170	55	70	70	11/12/08	3488.250	1385297.695	1694333.035	3427.17 - 3416.17	3478.170	3471.670	Overburden
Central Area	Weathered Shale	GW-1	DROVRB-WS	3469.810	10	20	20	01/08/90	3471.820	1385633.927	1695092.878	3461.81 - 3449.81	3455.310	DNR	Drift Overburden
		GW-7	DROVRB-WS	3447.400	14	24	24	01/11/90	3448.980	1386399.755	1694788.269	3435.40 - 3423.40	3424.680	DNR	Drift Overburden
		GW-C-24	WS-COMP	3446.931	85	45	45	10/24/10	3449.910	1386846.896	1695491.224	3413.78 - 3401.93	3480.931	3410.931	Drift Overburden
		GW-C-48	WS	3413.812	22	32	32	11/06/10	3417.156	1388010.643	1695909.621	3393.21 - 3381.81	3395.812	3357.812	Drift Overburden
		GW-H	WS	3465.223	25	35	35	10/27/10	3468.139	1387438.141	1696021.741	3441.72 - 3430.22	3453.723	DNR	Drift Overburden
		GW-K	WS	3460.764	35	45	45	09/16/10	3463.755	1387383.005	1695045.985	3427.66 - 3405.76	3444.764	3394.764	Drift Overburden
		LSSI-1	WS	3430.430	20	30	30	02/22/06	3431.370	1387755.000	1696381.000	3412.43 - 3400.43	3416.430	DNR	Drift Overburden
		LSSI-2	WS	3440.020	20	40	40	02/22/06	3440.760	1387719.000	1696166.000	3422.02 - 3400.02	3429.020	DNR	Drift Overburden
		LSSI-3	WS	3449.960	20	40	40	02/23/06	3450.790	1387624.000	1695965.000	3431.96 - 3409.96	3439.960	DNR	Drift Overburden
		LSSI-4	WS	3459.170	10	30	30	02/23/06	3460.950	1387495.019	1695776.404	3451.67 - 3429.17	3453.170	DNR	Drift Overburden
		LSSI-5	WS	3459.000	17	37	37	02/24/06	3460.080	1387384.310	1695574.390	3444.00 - 3422.00	3444.000	DNR	Drift Overburden
		LSSI-6	DROVRB-WS	3453.950	12	32	32	02/24/06	3454.840	1387317.130	1695317.040	3443.95 - 3421.95	3438.950	DNR	Drift Overburden
		LSSI-7	WS	3451.050	18	38	38	02/25/06	3452.230	1387432.840	1695101.910	3437.25 - 3413.05	3440.050	DNR	Drift Overburden
		LSSI-8	DROVRB-WS	3452.350	9	29	29	04/21/06	3453.530	1387229.060	1695365.070	3445.35 - 3423.35	3431.350	DNR	Drift Overburden
		LSSI-9	DROVRB-WS	3449.650	11	41	41	04/21/06	3452.380	1387290.030	1695154.140	3440.65 - 3408.65	3435.650	DNR	Drift Overburden
		LSSI-9R	WS	3450.034	25	85	35	09/23/10	3453.086	1387293.568	1695146.943	3427.28 - 3415.03	3486.034	DNR	Drift Overburden
		LSSI-10	DROVRB-WS	3449.050	7	27	27	04/22/06	3450.350	1387348.270	1694949.190	3444.05 - 3422.05	3430.050	DNR	Drift Overburden
		LSSI-11	DROVRB-WS	3444.950	8	28	28	04/22/06	3447.220	1387545.140	1694876.440	3438.95 - 3416.95	3435.950	DNR	Drift Overburden
		LSSI-12	DROVRB-WS	3434.480	8	28	28	04/23/06	3436.070	1387777.590	1694865.220	3428.48 - 3406.48	3415.480	DNR	Drift Overburden
		LSSI-13	DROVRB-WS	3424.480	9	29	29	04/23/06	3426.200	1387984.310	1694973.140	3417.48 - 3395.48	3410.480	DNR	Drift Overburden
		LSSI-14	DROVRB-WS	3415.200	10	30	30	04/29/06	3415.870	1388093.540	1695155.600	3407.20 - 3385.20	3400.200	DNR	Drift Overburden
		LSSI-15	DROVRB-WS	3449.240	10	30	30	04/26/06	3449.800	1387078.569	1695371.346	3441.24 - 3419.24	3435.240	DNR	Drift Overburden
		LSSI-15	DROVRB-WS	3449.240	10	30	30	04/26/06	3451.173	1387078.569	1695371.346	3441.24 - 3419.24	3435.240	DNR	Drift Overburden
		LSSI-16	WS	3445.360	8.3	28	28	04/26/06	3447.500	1387119.560	1695088.930	3439.06 - 3417.36	3440.360	DNR	Drift Overburden
		LSSI-16R	WS	3445.515	20	30	30	09/22/10	3446.597	1387117.286	1695095.355	3427.12 - 3415.52	3440.515	DNR	Drift Overburden
		LSSI-17	DROVRB-WS	3449.470	10	30	30	04/26/06	3451.707	1387202.211	1694849.716	3441.47 - 3419.47	3440.470	DNR	Drift Overburden
		LSSI-18	WS	3449.800	10	30	30	04/27/06	3450.420	1387404.310	1694728.280	3441.80 - 3419.80	3445.800	DNR	Drift Overburden
		LSSI-19	WS	3438.980	8	28	28	04/27/06	3440.750	1387691.890	1694706.370	3432.98 - 3410.98	3434.480	DNR	Drift Overburden
		LSSI-20	DROVRB-WS	3397.760	8	28	28	05/01/06	3400.220	1388261.490	1695317.470	3391.76 - 3369.76	3386.260	DNR	Drift Overburden
		LSSI-26	DROVRB-WS	3446.310	10	30	30	05/03/06	3447.080	1386874.080	1695346.150	3438.31 - 3416.31	3426.310	DNR	Drift Overburden
		LSSI-27	WS	3458.360	15	35	35	09/13/06	3458.940	1387243.640	1695629.160	3445.36 - 3423.36	3449.360	DNR	Drift Overburden
		LSSI-28	WS	3457.160	20	40	40	09/13/06	3458.640	1387097.000	1695710.000	3439.16 - 3417.16	3448.160	DNR	Drift Overburden
		LSSI-29	DROVRB-WS	3453.390	15	35	35	09/13/06	3453.930	1386867.000	1695799.000	3440.39 - 3418.39	3439.390	DNR	Drift Overburden
		LSSI-30	WS	3464.470	15	35	35	09/14/06	3465.210	1387078.000	1695948.000	3451.47 - 3429.47	3455.470	DNR	Drift Overburden
		LSSI-31	WS	3454.710	15	35	35	09/24/06	3455.600	1386829.270	1696013.950	3441.71 - 3419.71	3445.710	DNR	Drift Overburden
		LSSI-32	DROVRB-WS	3447.830	14	34	34	09/25/06	3448.720	1386656.690	1695813.590	3435.83 - 3413.83	3433.830	DNR	Drift Overburden
		LSSI-33	WS	3446.300	14	34	34	09/25/06	3446.960	1386771.190	1695565.620	3434.30 - 3412.30	3437.300	DNR	Drift Overburden
		LSSI-34	DROVRB-WS	3442.350	14	34	34	09/27/06	3443.320	1386959.080	1695178.950	3430.35 - 3408.35	3428.350	DNR	Drift Overburden
		LSSI-35	DROVRB-WS	3444.420	14	34	34	09/28/06	3445.220	1387018.140	1695002.070	3432.42 - 3410.42	3430.420	DNR	Drift Overburden
		LSSI-36	DROVRB-WS	3449.870	14	34	34	04/04/07	3450.910	1386680.060	1695958.280	3437.87 - 3415.87	3434.370	DNR	Drift Overburden
		LSSI-37	DROVRB-WS	3445.370	14	34	34	04/04/07	3446.660	1386485.300	1695811.530	3433.37 - 3411.37	3431.370	DNR	Drift Overburden
		LSSI-38	DROVRB-WS	3445.610	14	34	34	04/04/07	3446.910	1386643.120	1695658.320	3433.61 - 3411.61	3430.610	DNR	Drift Overburden
		P2RI-1S	WS	3390.400	18.5	23.5	23.5	12/03/09	3393.070	1388283.156	1694065.290	3374.90 - 3366.90	3382.400	DNR	Drift Overburden
		P2RI-2	WS	3447.800	24	29	29	01/06/10	3450.210	1387430.054	1694476.340	3426.80 - 3418.30	3437.300	3397.300	Drift Overburden
		P2RI-3S	WS	3400.030	15	20	22	12/20/09	3402.510	1388238.993	1694902.929	3386.03 - 3378.03	3387.530	DNR	Drift Overburden
		P2RI-4S	DROVRB-WS	3445.740	20	25	25	12/16/09	3448.610	1386632.969	1695325.231	3428.84 - 3420.74	3421.740	DNR	Drift Overburden
		P2RI-4D	WS	3445.810	84	89	39	01/11/10	3448.520	1386626.115	1695324.863	3414.11 - 3406.81	3422.810	3401.810	Drift Overburden
		P2RI-6	WS	3455.770	22	27	27	12/16/09	3458.190	1386937.956	1695747.637	3436.47 - 3428.77	3443.270	DNR	Drift Overburden
		P2RI-7	WS	3461.150	24	29	29	12/16/09	3463.890	1387268.031	1695740.406	3440.15 - 3430.15	3453.150	DNR	Drift Overburden
		P2RI-8	WS	3426.950	32	37	37	12/17/09	3429.740	1387871.396	1695731.414	3399.95 - 3389.95	3421.950	DNR	Drift Overburden
		P2RI-40S	WS	3415.376	14	19	19	11/07/10	3418.199	1388005.067	1694127.224	3401.98 - 3396.38	3406.376	DNR	Drift Overburden
		P2RI-41S	DROVRB	3385.250	12	17	17	09/10/10	3388.578	1388257.723	1694397.946	3375.35 - 3368.35	DNR	DNR	Drift Overburden
		P2RI-42S	DROVRB-WS	3447.199	15.2	20.2	20.2	09/16/10	3450.230	1386386.603	1694563.197	3432.70 - 3427.00	3429.699	DNR	Drift Overburden
		P2RI-48S	DROVRB-WS	3445.171	22	82	32	09/11/10	3448.128	1386762.415	1694836.022	3425.17 - 3413.17	3420.171	DNR	Drift Overburden
		P2RI-43D	WS	3445.192	54	64	64	11/10/10	3448.263	1386761.785	1694844.127	3392.89 - 3381.19	3418.192	DNR	Drift Overburden
		P2RI-44S	CLOVRB-WS	3406.670	18	23	23	09/11/10	3409.652	1388237.198	1695176.864	3390.67 - 3383.67	3386.670	DNR	Clay Overburden
		P2RI-44SR	WS	3407.976	25	30	30	05/07/11	3410.950	1388237.596	1695160.193	3386.98 - 3377.98	3388.476	DNR	Clay Overburden
		P2RI-50S	DROVRB-WS	3453.893	14	24	24	11/10/10	3456.903	1385724.911	1695648.700	3440.89 - 3429.89	3439.893	DNR	Drift Overburden
	Competent Shale	GW-A	COMP	3429.786	55	65	65	11/06/10	3432.782	1387822.283	1696044.593	3377.79 - 3364.79	3412.786	3389.786	Drift Overburden
		GW-C-25	COMP	3446.013	83	43	43	11/07/10	3449.285	1386488.154	1695866.427	3415.01 - 3403.01	3432.013	3416.013	Drift Overburden
		GW-D	COMP	3465.936	45	65	55	11/05/10	3469.071	1387371.419	1696382.548	3422.54 - 3410.94	3457.936	3425.936	Drift Overburden
		P2RI-1D	COMP	3390.900	47	62	52	01/10/10	3393.950	1388275.935	1694064.878	3345.90 - 3338.90	3382.900	3346.900	Drift Overburden
		P2RI-3D	COMP	3400.580	77	82	82	01/09/10	3402.910	1388230.832	1694902.736	3325.68 - 3318.58	3388.080	3366.580	Drift Overburden
		P2RI-41D	COMP	3385.973	59.5	64.5	64.5	09/23/10	3386.670	1388352.109	1694393.390	3328.97 - 3321.47	3361.973	3343.973	Drift Overburden
		P2RI-44D	COMP	3407.476	79	94	94	11/18/10	3410.707	1388237.271	1695166.494	3330.28 - 3313.48	3387.476	3373.476	Clay Overburden

TABLE 4.5-2. MONITORING WELLS BY GEOGRAPHIC AREA
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Network Area	Hydrostratigraphic Unit	Location	Unit Screened	Ground Surface (ft-msl)	Top of Screen (ft-bgs)	Bottom of Screen (ft-bgs)	Total Depth (ft-bgs)	Date Completed	MPE (ft-msl)	Easting (X)	Northing (Y)	Elevation of Screened Interval (top of sand pack to bottom of screen) (ft-msl)	Top of Weathered Shale Elevation (ft-msl)	Top of Competent Shale Elevation (ft-msl)	Overburden Type
Northwest Area	Alluvial Sediments and/or Glacial Drift	SDW-18	OVRB	No Log	No Log	No Log	No Log	No Log	3423.310	1387307.613	1697201.581	UNKNOWN	No Log	No Log	Overburden
		SDW-22S	OVRB	3458.590	No Log	No Log	No Log	No Log	3460.740	1384665.306	1696377.764	3456.59 - 3434.59	3433.590	3398.590	Overburden
		SDW-24S	OVRB	3446.000	No Log	No Log	No Log	No Log	3448.310	1385176.967	1696376.893	UNKNOWN	No Log	No Log	Overburden
		SDW-26S	OVRB	3384.320	No Log	No Log	No Log	No Log	3386.820	1386611.469	1698578.782	UNKNOWN	No Log	No Log	Overburden
	Weathered Shale	GW-CS	DROVRB-WS	3452.427	14	19	19	11/04/10	3452.245	1387242.038	1696661.265	3440.43 - 3433.43	3487.427	DNR	Drift Overburden
		GW-C-29	WS	3449.207	16	21	21	10/08/10	3451.766	1386505.292	1696191.951	3435.21 - 3428.21	3441.807	DNR	Drift Overburden
		GW-C-45	WS	3444.284	16	26	26	10/06/10	3446.747	1386467.745	1696698.145	3429.28 - 3418.28	3436.284	3394.284	Drift Overburden
		GW-C-46S	WS	3458.399	19	29	29	09/29/10	3461.147	1386884.013	1696410.756	3441.30 - 3429.40	3451.399	DNR	Drift Overburden
		GW-C-47S	WS	3443.214	10	20	20	09/28/10	3446.234	1386284.339	1696304.603	3434.21 - 3423.21	3435.214	DNR	Drift Overburden
		GW-MS	WS	3442.304	13	18	18	09/28/10	3444.866	1386300.145	1696550.770	3431.40 - 3424.30	3434.304	DNR	Drift Overburden
		P2RI-5	WS	3439.260	18	23	23	12/04/09	3442.230	1386007.110	1696167.477	3424.26 - 3416.26	3490.260	3412.260	Drift Overburden
		P2RI-5S	DROVRB-WS	3439.165	8	13	13	05/06/11	3442.299	1386001.056	1696168.062	3433.17 - 3426.17	3431.165	DNR	Drift Overburden
		P2RI-10S	DROVRB-WS	3432.590	10	15	15	01/12/10	3432.000	1387288.774	1697009.418	3424.99 - 3417.59	3421.890	DNR	Drift Overburden
		P2RI-11S	DROVRB-WS	3431.860	14	19	19.33	01/09/10	3434.760	1386132.938	1696577.441	3420.11 - 3412.53	3416.360	DNR	Drift Overburden
		P2RI-45S	DROVRB-WS	3440.658	6	16	16	09/11/10	3443.576	1386282.389	1696133.570	3436.66 - 3424.66	3434.658	DNR	Drift Overburden
		P2RI-45E	WS	3441.000	10	22	22	05/06/11	3443.804	1386302.716	1696112.757	3433.00 - 3419.00	3434.000	3415.000	Drift Overburden
		P2RI-45T	WS	3443.460	12.5	25	25	05/07/11	3445.664	1386322.037	1696127.637	3432.96 - 3418.46	3434.960	3416.460	Drift Overburden
		P2RI-46S	DROVRB-WS	3445.509	14	19	19	09/10/10	3448.586	1385539.261	1696200.294	3433.61 - 3426.51	3429.509	DNR	Drift Overburden
		P2RI-47S	DROVRB-WS	3421.140	20	25	25	09/27/10	3423.901	1383720.454	1698208.318	3404.14 - 3396.14	3400.140	DNR	Drift Overburden
		P2RI-52S	DROVRB-WS	3491.904	10	25	25	05/23/11	3494.790	1384425.306	1695814.553	3483.90 - 3466.90	3482.904	3471.904	Drift Overburden
		P2RI-56S	WS	3414.660	17	22	22	11/16/11	3417.586	1386861.585	1697631.283	3399.66 - 3392.66	3409.360	DNR	Drift Overburden
		SDW-1S	OVRB-WS	3439.530	4.5	9.5	13	03/10/08	3441.560	1386392.010	1696832.590	3437.03 - 3426.53	3433.530	3430.530	Overburden
		SDW-2S	WS-COMP	3428.940	14.5	19.5	22	03/11/08	3430.970	1386287.060	1697380.920	3418.44 - 3406.94	3420.940	3409.940	Overburden
		SDW-4S	WS	3426.120	14	19	0	03/12/08	3427.720	1386651.180	1697309.730	3413.12 - 3403.12	3417.120	3405.120	Overburden
		SDW-6S	WS	3434.220	20	25	26	03/20/08	3435.830	1385749.130	1696801.310	3417.22 - 3408.22	3425.220	3401.220	Overburden
		SDW-20S	WS-COMP	3453.340	15	25	27	11/13/08	3455.570	1385681.565	1697585.725	3442.34 - 3426.34	3453.340	3435.340	Overburden
		SDW-21S	WS-COMP	3444.060	10	20	22	02/02/09	3446.610	1384608.858	1697383.684	3437.56 - 3422.06	3444.060	3428.060	Overburden
		SDW-24M	WS-COMP	3446.250	49	59	60	02/05/09	3448.320	1385176.967	1696377.893	3400.25 - 3386.25	3431.250	3388.250	Overburden
		SDW-25S	OVRB-WS	3440.080	10	25	26	02/10/09	3442.510	1385683.647	1696271.629	3433.08 - 3414.08	3430.080	3411.080	Overburden
		SDW-27S	OVRB-WS	3402.140	10	20	22	05/06/09	3404.140	1384626.404	1698739.899	3397.14 - 3380.14	3392.140	3387.140	Overburden
		SIGW-1	DROVRB-WS	3453*	10	35	35	05/05/08	UNKNOWN	1386721.551	1696594.134	3389.50 - 3373.50	3398.500	3389.500	Overburden
	Competent Shale	GW-CD	COMP	3453.101	60	70	70	11/05/10	3455.725	1387278.510	1696655.974	3395.10 - 3383.10	3487.601	3397.101	Drift Overburden
		GW-CDE	COMP	3453.372	105	115	115	11/07/10	3455.822	1387277.672	1696648.977	3350.87 - 3338.37	3487.872	3397.372	Drift Overburden
		GW-G-46DF	COMP	3458.194	115	125	126	12/02/10	3461.133	1386687.246	1696414.730	3345.19 - 3333.19	3461.194	3409.194	Drift Overburden
		GW-G-47DF	COMP	3443.100	80	90	90	10/23/10	3446.389	1386283.413	1696298.088	3365.15 - 3353.10	3435.100	3395.100	Drift Overburden
		GW-MDF	COMP	3442.456	105	115	115	10/13/10	3445.067	1386305.148	1696544.676	3339.66 - 3327.46	3434.456	3396.456	Drift Overburden
		P2RI-10D	COMP	3432.030	67	72	72	01/20/10	3431.550	1387287.959	1697016.644	3367.03 - 3360.03	3420.830	3407.530	Drift Overburden
		P2RI-11D	COMP	3432.380	53.75	58.75	62.5	01/10/10	3434.950	1386131.098	1696568.268	3380.96 - 3369.88	3416.380	3383.380	Drift Overburden
		P2RI-24S	COMP	3412.470	4	9	9	01/19/10	3412.030	1387248.235	1697505.877	3409.47 - 3403.47	3405.470	DNR	Clay Overburden
		P2RI-24D	COMP	3412.685	43	53	53	11/03/10	3412.429	1387247.812	1697507.716	3371.69 - 3359.69	3405.685	3375.685	Clay Overburden
		P2RI-45D	COMP	3440.950	29	39	39	11/10/10	3443.921	1386297.814	1696118.207	3413.95 - 3401.95	3434.450	3416.950	Drift Overburden
		P2RI-46D	COMP	3445.813	58	68	68	09/13/10	3448.922	1385539.335	1696191.751	3389.81 - 3377.81	3428.813	3408.813	Drift Overburden
		P2RI-46DFL	COMP	3445.932	109	119	119	09/15/10	3448.923	1385539.090	1696182.955	3340.03 - 3326.93	3427.932	3408.932	Drift Overburden
		P2RI-46DFU	COMP	3446.316	84	94	94	05/04/11	3449.444	1385537.589	1696162.589	3366.82 - 3352.32	3429.316	3409.316	Drift Overburden
		P2RI-47DP	COMP	3421.135	88	98	98	09/28/10	3423.853	1383720.944	1698213.563	3336.14 - 3323.14	3400.135	3381.135	Drift Overburden
		P2RI-52DF	COMP	3491.825	128	158	156	05/22/11	3494.462	1384425.734	1695824.513	3368.33 - 3333.83	3482.825	3471.825	Drift Overburden
		P2RI-56DF	COMP	3414.490	58	88	90	11/16/11	3417.541	1386869.356	1697632.736	3358.29 - 3324.49	3409.190	3391.490	Drift Overburden
		SDW-1D	COMP	3439.530	52	62	72	03/10/08	3440.920	1386392.010	1696833.590	3393.53 - 3367.53	3433.530	3430.530	Overburden
		SDW-2D	COMP	3428.940	80	90	90	03/11/08	3430.350	1386287.060	1697381.920	3360.44 - 3338.94	3420.940	3409.940	Overburden
		SDW-4D	COMP	3426.120	55	65	103	03/12/08	3427.450	1386651.180	1697310.730	3375.12 - 3323.12	3417.120	3405.120	Overburden
		SDW-5D	COMP	3448.680	99	109	121	03/18/08	3449.860	1384879.110	1697218.610	3352.68 - 3327.68	3420.680	3405.680	Overburden
		SDW-6D	COMP	3434.220	70	75	112	03/20/08	3435.540	1385749.130	1696802.310	3366.22 - 3322.22	3425.220	3401.220	Overburden
		SDW-15D	COMP	3424.500	100	110	120	04/01/08	3423.920	1387311.910	1697184.780	3327.50 - 3304.50	3422.500	3411.500	Overburden
		SDW-15S	COMP	3424.500	20	25	26	04/01/08	3424.150	1387311.910	1697183.780	3410.50 - 3398.50	3422.500	3411.500	Overburden
		SDW-20D	COMP	3453.340	130	150	150	11/13/08	3455.330	1385681.565	1697586.725	3325.34 - 3303.34	3453.340	3435.340	Overburden
		SDW-21D	COMP	3444.060	111	141	141	02/02/09	3446.460	1384608.858	1697384.684	3335.06 - 3303.06	3444.060	3428.060	Overburden
		SDW-22D	COMP	3458.590	129	154	154	02/03/09	3460.630	1384665.306	1696378.764	3332.59 - 3304.59	3433.590	3398.590	Overburden
		SDW-24D	COMP	3446.250	100	120	120	02/05/09	3448.220	1385176.967	1696378.893	3348.25 - 3326.25	3431.250	3388.250	Overburden
		SDW-25D	COMP	3440.080	107	117	118	02/10/09	3442.260	1385683.647	1696272.629	3345.08 - 3322.08	3430.080	3411.080	Overburden
		SDW-26D	COMP	3384.320	57	77	80	02/11/09	3386.660	1386611.469	1698580.782	3332.32 - 3304.32	3376.320	3365.320	Overburden
		SDW-26M	COMP	3384.320	32	37	39	02/11/09	3386.770	1386611.469	1698579.782	3358.32 - 3345.32	3376.320	3365.320	Overburden
		SDW-27D	COMP	3402.140	73.5	83.5	85	05/06/09	3404.560	1384626.404	1698740.899	3332.14 - 3317.14	3392.140	3387.140	Overburden
		SDW-28D	COMP	3393.110	80	100	101	05/07/09	3395.480	1385575.756	1698714.791	3317.11 - 3292.11	3384.110	3368.110	Overburden
		SDW-28S	COMP	3393.110	34	49	52	05/07/09	3395.650	1385575.756	1698713.791	3365.11 - 3341.11	3384.110	3368.110	Overburden
		SDW-29D	COMP	3422.450	77	97	102	05/07/09	3425.050	1384024.695	1698080.234	3350.45 - 3320.45	3415.450	3396.450	Overburden
		SDW-29S	COMP	3422.450	33	48	50	05/07/09	3425.180	1384024.695	1698079.234	3394.45 - 3372.45	3415.450	3396.450	Overburden
		SDW-30D	COMP	3461.830	97	117	120	05/11/09	3464.390	1383875.232	1696963.418	3370.33 - 3341.83	3455.830	3445.830	Overburden
		SDW-30S	COMP	3461.830	30	40	41	05/11/09	3464.560	1383875.232	1696962.418	3435.83 - 3420.83	3455.830	3445.830	Overburden
		SDW-31	COMP	3435.930	92	112	120	05/12/09	3438.330	1386340.136	1696909.095	3348.93 - 3315.93	3429.930	3411.930	Overburden

Notes:

P2RI-18SR	location installed as part of the Phase II Remedial Investigation
GW-6R	well plugged and abandoned
CLOVRB	clay overburden; also called alluvial sediments
DROVRB	drift overburden; also called glacial drift
OVRB	overburden, undifferentiated
CLOVRB-WS	screened across clay overburden - weathered shale contact
WS	weathered shale
DROVRB-WS	screened across drift overburden - weathered shale contact
WS-COMP	screened across weathered shale - competent shale transition
OVRB-WS	screened across overburden - weathered shale contact
COMP	competent shale
ft-msl	feet above mean sea level
ft-bgs	feet below ground surface
DNR	did not reach
UNKNOWN	data not available
*	no survey data; ground surface elevation from digital elevation model
MPE	measuring point elevation

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-1S	01/27/10	ND(0.0015) UJ	0.0048 J	0.164	0.00065	ND(0.002)	0.0167	0.0078	0.0117	ND(0.005)	0.0124 J	ND(0.000056)	0.134	0.466 J	ND(0.0004)	0.0217	0.0585
P2RI-1S	06/22/10	ND(0.0015)	0.027	0.415 J	0.0021 J	ND(0.002) UJ	0.0457	0.019 J	0.0378	ND(0.005)	0.0147 J	0.000058 JB	0.261 J	0.515	ND(0.0004) UJ	0.104	0.178
P2RI-1S	09/21/10	ND(0.0006)	0.0115 J	0.207 J	0.00089 J	ND(0.002)	0.0247	0.0108	0.0301	0.0051 J	0.0122 J	ND(0.000056)	0.196	0.606	ND(0.00016)	0.03	0.136
P2RI-1S	10/27/10	ND(0.0006)	0.0117	0.263	0.00074	ND(0.01)	0.0267	0.0125	0.0284	ND(0.005)	ND(0.0345)	ND(0.000056)	0.173	0.579	ND(0.00016)	0.0488	0.119
P2RI-1D [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	03/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	09/23/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	10/28/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3S	03/15/11	ND(0.0003)	0.0015 J	0.102	ND(0.00013)	ND(0.002)	0.0096 J	ND(0.0023)	0.0197	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0126	0.0023	ND(0.00008)	0.0079	0.0417
P2RI-3S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3S	09/13/11	ND(0.00042)	0.001 J	0.046 J	ND(0.00013)	0.00032 JB	0.0025 JB	ND(0.00062)	0.0141	ND(0.005)	ND(0.0022) UJ	0.000029 JB	0.0064 J	0.0031 J	ND(0.000098)	0.0011 J	0.0107 J
P2RI-3D [a]	02/18/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	09/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	10/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4D	01/27/10	ND(0.0015) UJ	ND(0.0048)	0.0986	0.00031 J	ND(0.01)	0.0085 J	0.029	0.0362	ND(0.005)	ND(0.0345)	0.000079 J	0.143	0.0172 J	0.00067 J	0.0107	0.0444 J
P2RI-4D	06/22/10	ND(0.0015)	ND(0.0048)	0.0544 J	ND(0.0013) UJ	ND(0.01) UJ	ND(0.017)	0.0299 J	0.0262 J	ND(0.005)	ND(0.0345) UJ	0.00011 JB	0.197 J	0.0096 J	0.001 J	ND(0.0125)	ND(0.0405)
P2RI-4D	09/21/10	0.0015 J	ND(0.0048) UJ	0.0204 J	ND(0.00065) UJ	ND(0.002)	0.0034 J	0.0126 J	0.0267 J	ND(0.005) UJ	ND(0.0069) UJ	0.000078 J	0.12	0.0044 J	0.0013 J	ND(0.0025) UJ	0.0217 J
P2RI-4D	10/26/10	ND(0.0015) UJ	ND(0.0048)	0.018 J	ND(0.00065)	ND(0.01)	ND(0.017)	0.0217 J	ND(0.0135)	ND(0.005)	ND(0.0345) UJ	0.000097 J	0.117	0.0025 J	0.00073 J	ND(0.0125)	ND(0.0405)
P2RI-5	01/29/10	ND(0.003)	ND(0.0095) UJ	0.0948 J	ND(0.0013)	ND(0.01)	0.0101 J	0.235 J	0.009 J	ND(0.005)	ND(0.0345) UJ	ND(0.000056)	0.467 J	0.202 J	ND(0.0008)	0.0095 J	0.602 J
P2RI-5	06/22/10	ND(0.0015)	0.0081 J	0.104 J	0.00074 J	ND(0.01) UJ	ND(0.017)	0.243 J	ND(0.0135)	ND(0.005)	ND(0.0345) UJ	0.000091 JB	0.659 J	0.296	ND(0.0004) UJ	ND(0.0125)	0.563
P2RI-5	09/23/10	0.00056 J	0.0056	0.0654	0.00049 J	0.0029 J	ND(0.017)	0.215	0.0108	ND(0.005) UJ	ND(0.0069)	ND(0.000056)	0.474	0.298	0.0003 J	ND(0.0025)	0.598
P2RI-5	10/28/10	ND(0.0006)	0.0068	0.0829 J	0.00067 J	ND(0.01)	ND(0.017)	0.245	ND(0.0135)	ND(0.005)	ND(0.0345)	ND(0.000056)	0.537	0.341	0.00034 J	ND(0.0125)	0.719
P2RI-5	03/15/11	ND(0.003)	ND(0.0095)	0.0079 J	ND(0.0013)	ND(0.01)	ND(0.017)	0.214	0.0243 J	ND(0.005) R	ND(0.0345)	ND(0.00005) UJ	0.452	0.312	ND(0.0008)	ND(0.0125)	0.655
P2RI-5	06/13/11	ND(0.0042) UJ	ND(0.0095)	0.0071 JB	ND(0.0013) UJ	0.0016 JB	0.0083 JB	0.225	0.0211 J	ND(0.005)	ND(0.011) UJ	0.000039 J	0.722 J	0.426 J	ND(0.00098) UJ	ND(0.0048)	0.665
P2RI-5S [a]	06/28/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-5S	09/19/11	ND(0.0021)	0.0165 J	0.255	0.001 J	ND(0.0014)	0.0286 J	0.0613	0.0421 JB	ND(0.005) R	0.0257 J	ND(0.000026) UJ	0.0975 J	0.0045 J	ND(0.00049)	0.0396	0.126
P2RI-5S	12/09/11	ND(0.0042)	0.0151 J	0.204	0.00084 J	ND(0.0014)	0.0324 J	0.0782	0.0315 J	ND(0.005) R	ND(0.011) UJ	0.000055 JB	0.159	0.0083 JB	ND(0.00098)	0.0412	0.14
P2RI-5S	03/21/12	ND(0.0042)	0.0111	0.254	ND(0.0013)	ND(0.0014)	0.0172	0.0428	0.0168	ND(0.005)	0.0554	0.00005	0.104	0.003	ND(0.00098)	0.0261	0.118
P2RI-6	01/29/10	ND(0.003)	ND(0.0095) UJ	0.115 J	ND(0.0013)	ND(0.01)	0.0137 J	0.24 J	0.016 J	0.013	ND(0.0345) UJ	0.000096 J	0.484 J	0.213 J	0.00096 J	0.0143 J	0.348 J
P2RI-6	06/23/10	ND(0.003)	0.0217	0.207 J	0.0018 J	ND(0.01)	0.042 J	0.224	0.0236 J	0.009 J	ND(0.0345)	0.00011 J	0.499	0.244	0.0012 J	0.0438	0.499
P2RI-6	09/23/10	ND(0.0015)	0.0116	0.167	0.001 J	ND(0.01)	0.0245 J	0.233	0.025 J	0.0079 J	ND(0.0345)	0.000082 J	0.476	0.305	0.00076 J	0.0179 J	0.44
P2RI-6	10/28/10	ND(0.0006)	0.0113	0.207 J	0.00092 J	ND(0.01)	0.0244 J	0.185	0.0183 J	ND(0.005)	ND(0.0345)	0.0001 J	0.401	0.329	0.00082 J	0.0339	0.4
P2RI-7 [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-9S	01/29/10	ND(0.003)	0.0386 J	0.753 J	0.0018 J	0.0033 J	0.0426 J	0.0282 J	0.0506 J	0.021 J	0.0397 J	0.00017 J	0.0877 J	ND(0.0099)	ND(0.0008)	0.0984 J	0.273 J
P2RI-9S	06/23/10	ND(0.0015)	ND(0.0048)	0.0153 J	ND(0.00065)	ND(0.002)	0.006 J	0.0037 J	0.0095 J	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0313	ND(0.0013)	ND(0.0004)	ND(0.0025)	ND(0.0081)
P2RI-9S	09/21/10	ND(0.0006)	0.0058 J	0.0755 J	0.00034 J	ND(0.002)	0.0056 J	0.0092 J	0.0135 J	ND(0.005) UJ	0.0113 J	ND(0.000056)	0.0454	0.001 J	ND(0.00016)	0.0071 J	0.0238 J
P2RI-9S	10/27/10	ND(0.0006)	0.0036	0.0882	ND(0.00026)	ND(0.002)	0.0053	0.0121	0.0095	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0327	0.00097	ND(0.00016)	0.0082	0.0209
P2RI-9D	01/29/10	0.0018 J	ND(0.0048) UJ	0.0537 J	ND(0.00065)	ND(0.002)	ND(0.0034) UJ	0.0074 J	ND(0.0027) UJ	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0282 J	ND(0.005)	ND(0.0004)	0.0069 J	0.0302 J
P2RI-9D	06/23/10	ND(0.0015)	ND(0.0048)	0.0142 J	ND(0.00065)	ND(0.002)	ND(0.0034) UJ	ND(0.0023)	0.0028 J	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0047 J	ND(0.0013)	ND(0.0004)	ND(0.0025)	ND(0.0081)
P2RI-9D	09/21/10	0.0016 J	0.0026 J	0.0156 J	ND(0.00026) UJ	ND(0.002)	ND(0.0034) UJ	ND(0.0023) UJ	0.0035 J	ND(0.005) UJ	ND(0.0069) UJ	ND(0.000056)	0.009	ND(0.0005)	ND(0.00016)	ND(0.0025) UJ	0.0103 J
P2RI-9D	10/27/10	0.003	ND(0.0019)	0.0435	ND(0.00026)	ND(0.002)	ND(0.0034)	0.0032	0.0041	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0062	ND(0.0005)	ND(0.00016)	ND(0.0025)	0.0652
P2RI-10S	01/29/10	ND(0.003)	ND(0.0095) UJ	0.438 J	ND(0.0013)	ND(0.002)	0.0153 J	0.0073 J	0.014 J	--	0.0177 J	ND(0.000056)	0.0412 J	0.0173 J	ND(0.0008)	0.0363 J	0.0771 J
P2RI-10S [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10S	09/20/10	ND(0.0006)	0.0036 J	0.199 J	0.00063 J	ND(0.002)	0.0076 J	0.004 J	0.0129 JB	--	ND(0.0069)	ND(0.000056)	0.0143	0.043	ND(0.00016)	0.013	0.037
P2RI-10S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	09/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-11S	01/29/10	ND(0.003)	0.0134 J	0.297 J	ND(0.0013)	ND(0.002)	0.0254 J	0.02 J	0.016 J	ND(0.005)	0.0174 J	ND(0.000056)	0.0531 J	ND(0.0099)	ND(0.0008)	0.0558 J	0.117 J
P2RI-11S	06/23/10	ND(0.0015)	0.0437	0.525 J	0.0028	ND(0.002)	0.0601 J	0.0359	0.048	ND(0.005)	0.035	ND(0.000056)	0.115	0.0019 J	ND(0.0004)	0.129	0.249
P2RI-11S	09/21/10	ND(0.0006)	0.0832 J	0.778 J	0.0046 J	ND(0.002)	0.101 J	0.0472 J	0.0835 J	ND(0.005) UJ	0.0583 J	ND(0.000056)	0.198 J	0.0037 J	0.00042 J	0.22 J	0.47 J
P2RI-11S Dup	09/21/10	ND(0.0006)	0.0107 J	0.0326 J	0.00075 J	ND(0.002)	0.0056 J	0.0094 J	0.0137 J	ND(0.005) UJ	0.0071 J	ND(0.000056)	0.0668 J	0.0027 J	ND(0.00016) UJ	0.0063 J	0.0302 J
P2RI-11S	10/27/10	ND(0.0006)	0.0562	1.06	0.003	ND(0.002)	0.103	0.0375	0.0742	ND(0.005)	0.0464	ND(0.000056)	0.113	0.0023	ND(0.00016)	0.246	0.445
P2RI-11S Dup	10/27/10	ND(0.0006)	0.0038	0.0826	ND(0.00026)	ND(0.002)	0.0091	0.01	0.0077	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0337	0.00083	ND(0.00016)	0.014	0.0385
P2RI-11D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	0.00089 J	0.0117	0.38 J	0.00058	ND(0.002)	0.0172 J	0.0046 J	0.0308	ND(0.005)	0.0111 J	ND(0.000056)	0.0215	0.0208	ND(0.00008)	0.026	1.87
P2RI-12	09/22/10	ND(0.0006) UJ	0.0089 J	0.256 J	0.00061	ND(0.002)	0.0151	0.0059	0.0349 JB	ND(0.005)	0.0071 J	ND(0.000056)	0.0212	0.0613 J	ND(0.00008)	0.0247	0.562
P2RI-12	10/25/10	ND(0.0006) UJ	0.0251 J	0.289 J	0.0025	ND(0.002)	0.0234	0.019	0.0394	ND(0.005)	0.0215 J	ND(0.000056)	0.058	0.0452 J	0.00022 J	0.0535	0.354
P2RI-12	03/30/11	0.00035 J	0.0018 J	0.0326	ND(0.00013)	ND(0.002)	ND(0.0034)	ND(0.0023)	0.0314	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0041	0.0294	ND(0.00008)	0.0029 J	0.0612
P2RI-13 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	01/28/10	ND(0.003)	ND(0.0095) UJ	0.134 J	ND(0.0013)	ND(0.002)	0.0149 J	0.037 J	0.0487 J	ND(0.005)	0.0162 J	ND(0.000056)	0.0907 J	0.0242 J	ND(0.0008)	0.026 J	0.0741 J
P2RI-14 [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	09/22/10	ND(0.0006) UJ	0.0111 J	0.278 J	0.00078	ND(0.002)	0.0198	0.0162	0.0597	ND(0.005)	0.0137 J	ND(0.000056)	0.0396	0.0046 J	0.00032 J	0.037	0.339
P2RI-14	10/27/10	ND(0.0006)	0.0409	0.496 J	0.0027	ND(0.01)	0.0936	0.0657	0.147	ND(0.005) UJ	0.0508 J	ND(0.000056)	0.131	0.0194	0.00055 J	0.226	0.578
P2RI-15 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	ND(0.003)	ND(0.0095) UJ	0.0747 J	ND(0.0013)	ND(0.002)	0.0055 J	0.0074 J	0.034 J	ND(0.005)	0.0073 J	ND(0.000056)	0.0383 J	ND(0.0099)	ND(0.0008)	0.005 J	0.0222 J
P2RI-16S	06/24/10	ND(0.0015)	ND(0.0048)	0.0871 J	ND(0.00013)	ND(0.002)	ND(0.0034)	0.0042 J	0.0113	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0213	0.0043 J	ND(0.00008)	0.0143	0.262
P2RI-16S	09/22/10	ND(0.0015) UJ	ND(0.0019) UJ	0.0266 J	ND(0.00026)	ND(0.002)	0.0034 J	0.0065	0.0222 JB	ND(0.005)	ND(0.0345) UJ	ND(0.000056)	0.0298	0.0033 J	ND(0.00016)	ND(0.0025)	0.111
P2RI-16S	10/26/10	0.0021 J	ND(0.0019)	0.0584 J	ND(0.00026)	ND(0.01)	ND(0.017)	ND(0.0115)	ND(0.0135)	ND(0.005)	ND(0.0345) UJ	ND(0.000056)	0.0367	0.0079 J	ND(0.00016)	ND(0.0125)	0.212
P2RI-16D	03/10/11	ND(0.003)	ND(0.0095) UJ	0.0094 J	ND(0.0013)	ND(0.002)	ND(0.0034)	0.0098	0.0102	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0193 J	0.416 J	ND(0.0008)	ND(0.0125)	ND(0.0405)
P2RI-16D Dup	03/10/11	ND(0.003)	ND(0.0095) UJ	0.0093 J	ND(0.0013)	ND(0.002)	ND(0.0034)	0.0103	0.0105	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0363 J	0.0762 J	ND(0.0008)	ND(0.0125)	ND(0.0405)
P2RI-16D	06/11/11	ND(0.0021) UJ	ND(0.0048)	0.0083 JB	ND(0.00065) UJ	ND(0.00027)	0.0034 J	0.0079	0.0178	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0391 J	0.0697 J	ND(0.00049) UJ	ND(0.0048)	0.0083 J
P2RI-16D Dup	06/11/11	ND(0.0021) UJ	ND(0.0048)	0.0083 JB	ND(0.00065) UJ	ND(0.00027)	0.0028 J	0.0078	0.0181	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.031 J	0.0637 J	ND(0.00049) UJ	ND(0.0048)	0.0074 J
P2RI-16D	09/17/11	ND(0.0021)	ND(0.0048)	0.0071 J	ND(0.00065)	ND(0.0014)	0.0119 J	0.0094 J	0.0191 J	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0271	0.0568	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-16D Dup	09/17/11	ND(0.0021)	ND(0.0048)	0.0068 J	ND(0.00065)	ND(0.0014)	0.008 J	0.0089 J	0.014 J	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0295	0.0545	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-16D	12/08/11	ND(0.0021) UJ	ND(0.0048)	0.0078	ND(0.00065) R	ND(0.00027)	0.0021 J	0.0057	0.0075 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0374 J	0.0588 J	ND(0.00049)	ND(0.00096)	0.015 J
P2RI-16D Dup	12/08/11	ND(0.0021) UJ	ND(0.0048)	0.0074	ND(0.00065)	ND(0.00027)	0.0027 J	0.0062	0.0068 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0273 J	0.0433 J	ND(0.00049)	ND(0.0048)	0.0124 J
P2RI-17	01/28/10	ND(0.003)	ND(0.0095) UJ	0.214 J	ND(0.0013)	ND(0.002)	0.0077 J	0.0043 J	0.012 J	ND(0.005)	0.0102 J	ND(0.000056)	0.025 J	ND(0.0099)	ND(0.0008)	0.0133 J	0.033 J
P2RI-17	06/24/10	0.00056 J	0.005	0.143 J	ND(0.00065)	ND(0.01)	0.0137 J	ND(0.0115)	0.0207	ND(0.005)	ND(0.0345)	ND(0.000056)	0.0282	0.0173	ND(0.00008)	0.0258	ND(0.0405)
P2RI-17	09/20/10	0.00062 J	0.0025 J	0.0273 J	ND(0.00026)	ND(0.002)	0.0034 J	ND(0.0023)	0.0141 JB	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0229	0.0165	ND(0.00016)	ND(0.0025)	0.012 J
P2RI-17	10/25/10	0.0032	ND(0.0048)	0.0417	ND(0.00065)	ND(0.002)	0.0048 J	ND(0.0023)	0.0128	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0251	0.0116	ND(0.0004)	0.0036 J	0.0274
P2RI-18	01/28/10	ND(0.003)	ND(0.0095) UJ	0.077 J	ND(0.0013)	ND(0.002)	0.005 J	0.0072 J	0.0107 J	ND(0.005)	0.0089 J	ND(0.000056)	0.0371 J	ND(0.0099)	ND(0.0008)	0.0055 J	0.0211 J
P2RI-18	06/23/10	ND(0.0015)	ND(0.0048)	0.0359 J	ND(0.00065)	ND(0.002)	0.0044 J	ND(0.0023) UJ	0.0105 J	ND(0.005)	ND(0.0069)	0.000066 J	0.028 J	0.0091 J	ND(0.0004)	ND(0.0025) UJ	0.0224 J
P2RI-18 Dup	06/23/10	ND(0.0015)	ND(0.0048)	0.118 J	ND(0.00065)	ND(0.002)	0.0158 J	0.0074 J	0.0254 J	ND(0.005)	ND(0.0345)	0.000061 J	0.0428 J	0.009 J	ND(0.0004)	0.0127 J	0.0417 J
P2RI-18SR	11/05/10	ND(0.0015)	0.0056 J	0.108 J	ND(0.00065)	ND(0.002)	0.01 J	ND(0.0023)	0.0258	ND(0.005)	ND(0.0345) UJ	ND(0.000056)	0.0228	0.237 J	ND(0.0004)	0.0109	0.0304
P2RI-18SR	03/30/11	ND(0.0015) UJ	ND(0.0048)	0.0243	ND(0.00065)	ND(0.01)	ND(0.017)	ND(0.0115)	0.0213 J	ND(0.005) R	ND(0.0345)	ND(0.00005) UJ	0.0147	0.0861	ND(0.0004)	ND(0.0125)	ND(0.0405)
P2RI-18SR	06/10/11	0.0027 J	0.005 J	0.0591 J	ND(0.00065)	ND(0.00027)	0.0046 J	0.0043 J	0.0222	ND(0.005)	ND(0.0022) UJ	ND(0.000026)	0.0139	0.134 J	ND(0.00049)	0.002 J	0.0198 J
P2RI-18SR	09/17/11	ND(0.0021) UJ	ND(0.0048)	0.0277	ND(0.00065)	0.0021 J	0.0092 J	0.0062 J	0.0297 JB	ND(0.005)	ND(0.011)	ND(0.000026) UJ	0.0115	0.0741	ND(0.00049)	ND(0.0048)	0.0416 J
P2RI-18D	11/04/10	ND(0.0015)	ND(0.0048)	0.0523 R	ND(0.00065)	ND(0.004)	0.0055 J	0.0056 J	0.0147	ND(0.005)	ND(0.0138) UJ	ND(0.000056)	0.0401	0.0041 J	ND(0.0004)	0.0037 J	0.0169 J
P2RI-18D Dup	11/04/10	ND(0.0015)	ND(0.0048)	0.0127 J	ND(0.00065)	ND(0.004)	ND(0.0068)	0.0053 J	0.0127 J	ND(0.005)	ND(0.0138) UJ	ND(0.000056)	0.0314	0.0044 J	ND(0.0004)	ND(0.005)	ND(0.0162)
P2RI-18D	06/10/11	ND(0.0021)	ND(0.0048)	0.016 J	ND(0.00065)	ND(0.00027)	0.0017 J	0.005	0.0189	ND(0.005)	ND(0.0022) UJ	ND(0.000026)	0.0195	0.0038 J	ND(0.00049)	ND(0.00096)	0.0058 J
P2RI-18D	09/17/11	ND(0.0021) UJ	ND(0.0048)	0.0086 J	ND(0.00065)	0.0019 J	0.0066 J	0.0073 J	0.0194 JB	ND(0.005) R	ND(0.011)	ND(0.000026) UJ	0.0232	0.0036 J	ND(0.00049)	ND(0.0048)	0.0197 J
P2RI-18D	12/08/11	ND(0.0021) UJ	ND(0.0048)	0.0088 J	ND(0.00065)	ND(0.00027)	0.0037 J	0.0074 JB	0.0093 JB	ND(0.005)	0.0104 JB	ND(0.000026) UJ	0.0249	0.005 JB	ND(0.00049)	ND(0.0019)	0.005 J
P2RI-19S	01/28/10	ND(0.003)	0.0172 J	0.314 J	0.0023 J	ND(0.002)	0.0231 J	0.0101 J	0.0276 J	0.013 J	0.0317 J	ND(0.000056)	0.0353 J	0.543 J	ND(0.0008)	0.0451 J	0.119 J
P2RI-19S	06/24/10	ND(0.0015)	0.0056 J	0.116 J	0.00024 J	ND(0.002)	ND(0.0034)	ND(0.0023)	0.0076 J	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0159	0.533	ND(0.00008)	0.012	ND(0.0081)
P2RI-19S	09/22/10	ND(0.0006) UJ	0.0029 J	0.0389 J	ND(0.00026)	ND(0.002)	0.0076 J	ND(0.0023)	0.0195 JB	ND(0.005) UJ	ND(0.0069) UJ	ND(0.000056)	0.0149	0.537 J	ND(0.00016)	ND(0.0025)	0.0342
P2RI-19S	10/27/10	ND(0.0006)	0.0056	0.152	ND(0.00026)	ND(0.01)	0.0125	ND(0.0115)	0.0195	ND(0.005)	ND(0.0345)	ND(0.000056)	0.0179	0.7	ND(0.00016)	0.0152	0.0431
P2RI-19D	11/16/10	ND(0.0015) UJ	ND(0.0048)	0.0789	ND(0.00065)	ND(0.002)	ND(0.0034)	0.017	0.0129 JB	ND(0.005)	0.0079 J	ND(0.000056)	0.0958 JB	0.221	ND(0.0004)	ND(0.0025)	0.0236 JB
P2RI-19D	03/11/11	ND(0.0015)	ND(0.0048) UJ	0.0082 J	ND(0.00065)	ND(0.002)	ND(0.0034)	0.0253	0.0081 J	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0991 J	0.267 J	ND(0.0004)	ND(0.0025)	0.0231
P2RI-19D	06/09/11	ND(0.0021)	0.0063 J	0.151 J	ND(0.00065)	ND(0.00027)	0.0048 J	0.0057	0.021	ND(0.005)	0.0059 JB	ND(0.000026)	0.0289	0.218 J	ND(0.00049)	0.0076	0.0197 J
P2RI-19D	09/15/11	ND(0.0021)	ND(0.0048)	0.0058 J	ND(0.00065)	0.0012 J	0.0017 J	0.0215	0.0159 JB	ND(0.005)	0.0026 JB	0.000053 JB	0.102	0.194	ND(0.00049)	ND(0.00096)	0.0237
P2RI-19D Dup	09/15/11	ND(0.0021)	ND(0.0048)	0.0058 J	ND(0.00065)	0.0013 J	ND(0.0011)	0.0209	0.0145 JB	ND(0.005)	ND(0.0022) UJ	0.000048 JB	0.105	0.189	ND(0.00049)	ND(0.00096)	0.023
P2RI-20	01/28/10	ND(0.003)	ND(0.0095) UJ	0.0566 J	ND(0.0013)	ND(0.002)	ND(0.0034) UJ	0.0024 J	0.0064 J	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0205 J	0.176 J	ND(0.0008)	0.0049 J	0.0124 J
P2RI-20 Dup	01/28/10	ND(0.003)	0.0322 J	0.438 J	0.0025 J	0.003 J	0.0493 J	0.0244 J	0.0659 J	ND(0.005)	0.046 J	ND(0.000056)	0.0952 J	0.188 J	ND(0.0008)	0.102 J	0.242 J
P2RI-20	06/24/10	0.00038 J	0.0084	0.277 J	ND(0.00065)	ND(0.002)	0.016	0.0065	0.023	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0319	0.229	0.00012 J	0.0306	0.0691
P2RI-20	09/20/10	ND(0.0006)	ND(0.0019)	0.0314 J	ND(0.00026)	ND(0.002)	ND(0.0034)	ND(0.0023)	0.01 JB	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0179	0.224	ND(0.00016)	ND(0.0025)	0.0104 J
P2RI-20 Dup	09/20/10	ND(0.0006)	ND(0.0019)	0.0291 J	ND(0.00026)	ND(0.002)	ND(0.0034)	ND(0.0023)	0.0082 JB	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0181	0.215	ND(0.00016)	ND(0.0025)	0.0099 J
P2RI-20	10/25/10	ND(0.0015)	ND(0.0048)	0.0717 J	ND(0.00065)	ND(0.002)	0.0058 J	0.0026 J	0.009 J	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0216	0.187	ND(0.0004)	0.0071	0.0202 J
P2RI-20 Dup	10/25/10	ND(0.0015)	ND(0.0048)	0.0333 J	ND(0.00065)	ND(0.002)	ND(0.0034)	ND(0.0023)	0.0139 J	ND(0.005)	ND(0.0345)	ND(0.000056)	0.0226	0.244	ND(0.0004)	ND(0.0025)	0.0422 J

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-21S	11/05/10	ND(0.0015)	ND(0.0048)	0.0348 J	ND(0.00065)	ND(0.004)	0.0074 J	0.0113	0.0201	ND(0.005)	ND(0.0138) UJ	ND(0.000056)	0.0515	0.0401 J	ND(0.0004)	ND(0.0025)	0.0172 J
P2RI-21S	03/09/11	ND(0.003) UJ	ND(0.0095)	0.0413 J	ND(0.0013)	ND(0.002)	0.005 J	0.0076	0.024	ND(0.005)	ND(0.0069)	ND(0.00005)	0.0476 J	0.03	ND(0.0008)	ND(0.0025)	0.0185 J
P2RI-21S	06/09/11	ND(0.0021)	0.0155 J	0.286 J	0.0011 J	0.00045 J	0.0165	0.0122	0.0361	ND(0.005)	0.0113 JB	ND(0.000026)	0.0645	0.0239 J	ND(0.00049)	0.0259	0.0581
P2RI-21S	09/15/11	ND(0.0042)	ND(0.0095)	0.0345 J	ND(0.0013)	0.0021 J	0.007 J	0.0066 J	0.0239 JB	ND(0.005)	ND(0.011) UJ	0.000057 JB	0.0559	0.0251	ND(0.00098)	ND(0.0048)	0.0247 J
P2RI-21D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-21D [a]	03/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-21D [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-21D [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-22S	01/27/10	ND(0.0015) UJ	ND(0.0048)	0.0465	0.00032 J	ND(0.002)	ND(0.0034)	0.0055	0.0095 J	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0221	0.0651 J	ND(0.0004)	0.0041 J	0.012 J
P2RI-22S	06/24/10	ND(0.0015)	ND(0.0048)	0.0304 J	ND(0.00013)	ND(0.002)	ND(0.0034)	ND(0.0023)	0.0059 J	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0078 J	0.0165 J	ND(0.00008)	0.0046 J	ND(0.0081)
P2RI-22S Dup	06/24/10	ND(0.0015)	0.0074 J	0.0931 J	0.00026 J	ND(0.002)	ND(0.0034)	0.0023 J	0.0093 J	ND(0.005)	0.0074 J	0.000058 J	0.0174 J	0.0374 J	ND(0.0004)	0.0118	0.0085 J
P2RI-22S	09/22/10	ND(0.0006) UJ	0.0016 J	0.0258 J	ND(0.00013)	ND(0.002)	0.0036 J	ND(0.0023)	0.0113 JB	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0103	0.0048 J	ND(0.00008)	ND(0.0025)	0.0487
P2RI-22S	10/26/10	ND(0.0015) UJ	0.0049 J	0.068 J	ND(0.00026)	ND(0.002)	0.0036 J	0.0047 J	0.0176	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0158	0.0851 J	ND(0.00016)	0.0037 J	0.0237
P2RI-22D	01/27/10	ND(0.0015) UJ	0.0858	0.677	0.0051	0.0098	0.0916	0.104	0.122	ND(0.005)	0.0761	ND(0.000056)	0.434	0.11 J	0.0013 J	0.193	0.848
P2RI-22D	06/24/10	0.00077 J	0.0788	1.07 J	0.0049	0.0044 J	0.0832	0.0541	0.109	ND(0.005)	0.0783	ND(0.000056)	0.168	0.0255	0.00073	0.202	0.95
P2RI-22D	09/22/10	0.0027 J	0.0043 J	0.0357 J	ND(0.00026)	ND(0.002)	0.0039 J	0.0047 J	0.0119 JB	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0261	0.0054 J	ND(0.00016)	0.0052	0.0611
P2RI-22D	10/26/10	ND(0.0015) UJ	0.0074 J	0.0177 J	ND(0.00065)	ND(0.002)	ND(0.0034)	0.0028 J	ND(0.0027)	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0052 J	0.0015 J	ND(0.0004)	0.0044 J	0.0166 J
P2RI-22D	06/09/11	ND(0.0021) UJ	0.0107 J	0.0192 J	ND(0.00065) UJ	ND(0.00027) UJ	0.0021 J	ND(0.00062) UJ	0.0147 J	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0043 J	0.0014 J	ND(0.00049) UJ	0.0095 J	0.0673 J
P2RI-22D	09/15/11	ND(0.0042)	0.0097 J	0.016 J	ND(0.0013)	ND(0.00027)	0.0021 J	0.0028 J	0.0156 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026)	0.0051 J	ND(0.0027)	ND(0.00098)	0.008	0.0249
P2RI-23S	01/27/10	ND(0.0015) UJ	0.0157	0.979	0.002	ND(0.002)	0.0212	0.0102	0.0238	ND(0.005)	0.0277	ND(0.000056)	0.0477	0.0059 J	ND(0.0004)	0.0444	0.105
P2RI-23S	06/23/10	ND(0.0015)	0.0067 J	0.0446 J	ND(0.00065)	ND(0.002)	0.0064 J	ND(0.0023)	0.0165	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0278	0.0031 J	ND(0.0004)	0.006	0.0243
P2RI-23S	09/22/10	0.00097 J	0.0027 J	0.0621 J	ND(0.00026)	ND(0.002)	0.006 J	0.0026 J	0.0157 JB	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.02	0.0034 J	ND(0.00016)	0.0039 J	0.159
P2RI-23S	10/27/10	0.0027	0.0045	0.0751	ND(0.00026)	ND(0.002)	0.0053	0.0055	0.0119	ND(0.005)	ND(0.0069)	ND(0.000056)	0.0257	0.0014	ND(0.00016)	0.0074	0.58
P2RI-23D	11/11/10	ND(0.0015)	0.007 J	0.0313 J	ND(0.00065)	ND(0.002)	0.0062 J	0.0107	0.0149	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0864	0.256	ND(0.0004)	0.0025 J	0.0483 JB
P2RI-23D	03/15/11	ND(0.003)	ND(0.0095)	0.046	ND(0.0013)	ND(0.01)	ND(0.017)	ND(0.0115)	0.026 J	ND(0.005)	ND(0.0345)	ND(0.00005) UJ	0.0509	0.167	ND(0.0008)	ND(0.0125)	0.041 J
P2RI-23D	06/09/11	ND(0.0021)	ND(0.0048)	0.007 JB	ND(0.00065)	0.00055 J	ND(0.0011)	0.0105	0.0322	ND(0.005)	0.0033 JB	ND(0.000026)	0.0557	0.185 J	ND(0.00049)	ND(0.00096)	0.0559
P2RI-23D	09/16/11	ND(0.0021)	ND(0.0048)	0.0192	ND(0.00065)	ND(0.00027)	0.0024 J	0.0032 J	0.0169	ND(0.005)	ND(0.0022) UJ	0.000035 JB	0.0144	0.0033 J	ND(0.00049)	0.0021 J	0.0549
P2RI-24S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	ND(0.003) UJ	ND(0.0095)	0.0306	ND(0.0013)	ND(0.002)	ND(0.0068)	0.0105	ND(0.0054)	ND(0.005) UJ	ND(0.0138)	ND(0.00005) UJ	0.0245	ND(0.0025) UJ	ND(0.0008)	0.0087 J	0.0127 J
P2RI-24D	03/10/11	0.0027 J	ND(0.0048) UJ	0.0395 J	ND(0.00065)	ND(0.002)	ND(0.0034)	0.0113	0.0048 J	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0208 J	ND(0.0013) UJ	ND(0.0004)	0.0032 J	0.0162 J
P2RI-24D	06/10/11	0.005	0.008 J	0.116 J	ND(0.00065)	ND(0.00027)	0.0054 J	0.006	0.0149 JB	ND(0.005)	0.0052 JB	ND(0.000026)	0.0093 J	ND(0.0014)	ND(0.00049)	0.0104	0.0362
P2RI-24D	09/16/11	0.0038 J	0.0053 J	0.0445	ND(0.00065)	0.00061 J	ND(0.0011)	0.0031 J	0.0055 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0065 J	ND(0.0014)	ND(0.00049)	0.0051	0.0112 J
P2RI-25S	01/27/10	ND(0.0015) UJ	0.0122	0.212	0.00066	0.0056	0.0217	0.172	0.0226	ND(0.005)	0.0143 J	ND(0.000056)	0.446	0.267 J	ND(0.0004)	0.0459	0.603
P2RI-25S	06/24/10	ND(0.0015)	0.0057 J	0.0674 J	0.00037 J	0.0049 J	ND(0.0034)	0.166	0.0111	ND(0.005)	0.0088 J	0.000077 J	0.418	0.272	ND(0.0004)	0.02	0.459
P2RI-25S	09/22/10	0.001 J	0.001 J	0.0227 J	ND(0.00013)	ND(0.002)	ND(0.0034)	0.0444	0.0155 JB	ND(0.005) UJ	ND(0.0069) UJ	ND(0.000056)	0.113	0.095 J	ND(0.00008)	ND(0.0025)	0.109
P2RI-25S	10/28/10	ND(0.0006)	ND(0.0019)	0.0098 J	ND(0.00026)	ND(0.01)	ND(0.0034)	0.178	0.0107	ND(0.005)	ND(0.0345)	ND(0.000056)	0.408	0.349	ND(0.00016)	ND(0.0025)	0.512
P2RI-25D	11/11/10	ND(0.0015)	ND(0.0048) UJ	0.0392 J	ND(0.00065)	0.0055	0.0066 J	0.191	0.0144	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.52 J	0.358	ND(0.0004)	0.0055	0.546
P2RI-25D Dup	11/11/10	ND(0.0015)	0.008 J	0.0401 J	ND(0.00065)	0.0053	0.0072 J	0.19	0.0139	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.723 J	0.468	ND(0.0004)	0.0057	0.543
P2RI-25D	03/16/11	0.0032 J	ND(0.0048)	0.0336 J	ND(0.00065) UJ	0.0024 J	ND(0.017) UJ	0.0929	0.0974 J	ND(0.005)	0.0987 J	ND(0.00005) UJ	0.272	0.162 J	ND(0.0004)	ND(0.0125) UJ	0.206 J
P2RI-25D Dup	03/16/11	0.0039 J	ND(0.0048)	0.0486 J	ND(0.00065) UJ	0.002 J	0.0126 J	0.0851	0.144 J	ND(0.005)	0.0744 J	ND(0.00005) UJ	0.264	0.153 J	ND(0.0004)	0.0084 J	0.225 J
P2RI-25D	06/11/11	ND(0.00042) UJ	0.0028 J	0.008 JB	0.00031 J	0.0052	0.0022 J	0.191	0.0243	ND(0.005)	0.0029 JB	0.000037 JB	0.569 J	0.308 J	0.00013 J	ND(0.00096)	0.603
P2RI-25D	09/19/11	ND(0.0021)	ND(0.0048)	0.016 J	ND(0.00065)	0.0046 J	0.0027 J	0.17	0.0256	ND(0.005) UJ	0.0112 J	ND(0.000026) UJ	0.524	0.364	ND(0.00049)	ND(0.00096)	0.508
P2RI-26S	10/22/10	ND(0.0006)	0.0033 J	0.0824 J	ND(0.00026)	ND(0.002)	0.0062 J	0.0357	0.0154	ND(0.005)	ND(0.0069) UJ	ND(0.000046)	0.0227	0.234	ND(0.00016)	0.0082	0.0293
P2RI-26S Dup	10/22/10	ND(0.0006)	0.0034 J	0.0915 J	ND(0.00026)	ND(0.002)	0.0066 J	0.0353	0.0155	ND(0.005)	ND(0.0069) UJ	ND(0.000046)	0.0223	0.231	ND(0.00016)	0.0098	0.036
P2RI-26S	03/16/11	ND(0.0015) UJ	ND(0.0048)	0.0218 J	ND(0.00065) UJ	ND(0.002)	0.0035 J	0.0195	0.0158 J	ND(0.005)	ND(0.0069) UJ	ND(0.00005) UJ	0.0144	0.44 J	ND(0.0004)	ND(0.0025) UJ	0.0242 J
P2RI-26S	06/14/11	ND(0.0021)	ND(0.0048)	0.0137	ND(0.00065)	ND(0.00027)	0.0026 JB	0.0246	0.0123	ND(0.005)	ND(0.0022)	ND(0.000026)	0.0121	0.639	ND(0.00049)	ND(0.00096)	0.0287 JB
P2RI-26S	09/20/11	ND(0.0021)	ND(0.0048)	0.0206	ND(0.00065)	ND(0.00027)	0.0029 J	0.0331	0.0166	ND(0.005) R	ND(0.0022)	ND(0.000026) UJ	0.0222 J	0.408 J	ND(0.00049)	ND(0.00096)	0.0133 J
P2RI-26D	11/12/10	ND(0.0015)	0.0051 J	0.0271 R	ND(0.00065)	0.0046 J	0.0052 J	0.187	0.0155	ND(0.005)	ND(0.0069) UJ	0.000061 J	0.574	0.398	ND(0.0004)	ND(0.0025)	0.527
P2RI-26D	03/16/11	ND(0.0015) UJ	ND(0.0048)	0.0071 J	ND(0.00065) UJ	0.0047 J	ND(0.0034) UJ	0.189	0.022 J	ND(0.005)	0.0104 J	0.000054 J	0.583	0.33 J	ND(0.0004)	ND(0.0025) UJ	0.612 J
P2RI-26D Dup	03/16/11	ND(0.0015) UJ	ND(0.0048)	0.0067 J	ND(0.00065) UJ	0.0045 J	ND(0.0034) UJ	0.182	0.0212 J	ND(0.005)	0.0119 J	0.00007 J	0.544	0.318 J	ND(0.0004)	ND(0.0025) UJ	0.582 J
P2RI-26D	06/14/11	ND(0.0021)	ND(0.0048)	0.0063	ND(0.00065)	0.0048 J	0.0018 JB	0.202	0.0228	ND(0.005)	0.0028 J	0.000067 J	0.582	0.311	ND(0.00049)	ND(0.00096)	0.595
P2RI-26D	09/20/11	ND(0.0021)	ND(0.0048)	0.0086	ND(0.00065)	0.0045 J	0.003 J	0.199	0.0341	ND(0.005) R	0.0035 J	ND(0.000026) UJ	0.547 J	0.292 J	ND(0.00049)	ND(0.00096)	0.59
P2RI-27S	03/10/11	ND(0.0003)	0.0077	0.661 J	ND(0.0013)	ND(0.002) UJ	0.0145 J	0.0075 J	0.0146	ND(0.005)	0.0079 J	ND(0.00005) UJ	0.0672	0.071 J	ND(0.00008) UJ	0.0137	0.0782
P2RI-27S	06/14/11	ND(0.0021)	0.0087 J	0.276	0.0011 J	0.00096 J	0.0273	0.0101	0.0224	ND(0.005)	0.0105 J	0.000038 J	0.0835	0.0418	ND(0.00049)	0.0565	0.113 JB
P2RI-27S	09/14/11	ND(0.0042)	ND(0.0095)	0.128 J	ND(0.0013)	0.0028 J	0.0138 J	0.0114 J	0.0183 JB	ND(0.005) UJ	ND(0.011) UJ	0.000028 JB	0.0707	0.0493	ND(0.00098)	0.0226 J	0.0498 J
P2RI-27S	12/07/11	ND(0.0021)	ND(0.0048) UJ	0.0153	ND(0.00065)	ND(0.00027)	0.0024 J	0.001 J	0.002 JB	ND(0.005) R	ND(0.0022)	ND(0.000026)	0.0456	0.0468	ND(0.00049)	ND(0.00096)	0.0188 J
P2RI-27D	06/28/11	0.0014 J	0.0698	3.14	0.0048	0.0019 J	0.0998	0.0388	0.0882	ND(0.005)	0.0338	0.00033 JB	0.149	0.0129	0.00061 J	0.257	0.512
P2RI-27D	09/14/11	ND(0.0021)	0.0431	2.55 J	0.0035	0.0039 J	0.11	0.0352	0.0682	ND(0.005) UJ	0.0452 J	0.000045 JB	0.0999	0.0041 J	ND(0.00049)	0.311	0.423
P2RI-27D	12/07/11	ND(0.0021)	0.0144 J	1.66	0.00077 J	ND(0.00027)	0.017	0.0055	0.0158	ND(0.005) R	0.0104 JB	ND(0.000026)	0.0218	ND(0.0014)	ND(0.00049)	0.0531	0.108
P2RI-27D	03/20/12	0.004	0.0103	1.46	0.002	0.0005	0.017	0.0073	0.214	ND(0.005)	0.0153	ND(0.000026)	0.0206	ND(0.0014)	ND(0.00049)	0.0487	0.136
P2RI-27DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-28S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-28S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-28S [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-29S	12/09/11	ND(0.0021) UJ	ND(0.0048)	0.0225 J	ND(0.00065)	ND(0.00027)	0.0021 J	0.0053 JB	0.0065 JB	ND(0.005)	0.0085 JB	ND(0.000026) UJ	0.0157	0.0023 JB	ND(0.00049)	ND(0.00096)	0.0202
P2RI-29S	03/21/12	0.0023	ND(0.00095)	0.0179	ND(0.00065)	ND(0.00027)	ND(0.0011)	0.0033	0.0049	ND(0.005)	0.0133	ND(0.000026)	0.0153	0.0013	ND(0.000098)	ND(0.00096)	0.0234
P2RI-29S	05/18/12	ND(0.0021)	ND(0.0048)	0.0162	ND(0.00065)	ND(0.00027)	ND(0.0011)	0.0051	0.0074 J	ND(0.005)	0.0059 J	ND(0.000052) UJ	0.0125	0.0021 J	ND(0.00049) UJ	ND(0.00096)	0.0306

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-30S	12/09/11	ND(0.0021) UJ	ND(0.0048)	0.0182 J	ND(0.00065)	ND(0.00027)	0.0016 J	0.0034 JB	0.0054 JB	ND(0.005)	0.007 JB	ND(0.000026) UJ	0.0161	0.0019 JB	ND(0.00049)	ND(0.00096)	0.013 J
P2RI-30S	03/21/12	0.00058	0.0012	0.0181	ND(0.00065)	ND(0.00027)	0.0014	0.0073	0.0072	ND(0.005)	0.0155	ND(0.000026)	0.0181	0.0041	ND(0.000098)	ND(0.00096)	0.0614
P2RI-30S	05/21/12	ND(0.0021) UJ	ND(0.0048)	0.0168	ND(0.00065)	0.00055 JB	0.0019 J	0.0108	0.0042 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0181 J	0.004 J	ND(0.00049)	ND(0.00096)	0.0309
P2RI-31S	12/10/11	ND(0.0042)	ND(0.0095)	0.0264	ND(0.00065)	ND(0.00027)	0.0039 J	0.0423	0.0101 JB	ND(0.005)	0.0037 JB	ND(0.000026)	0.0811	ND(0.0027) UJ	ND(0.00098)	ND(0.00096)	0.0278
P2RI-31S	03/22/12	ND(0.0021)	ND(0.0048)	0.0193	ND(0.00065)	ND(0.00027)	0.0016	0.0428	0.0105	ND(0.005)	0.014	ND(0.000026)	0.0688	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0634
P2RI-31S	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0208	ND(0.0013)	0.00053 JB	0.0032 J	0.0417	0.0111 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0642 J	ND(0.0027)	ND(0.00098)	ND(0.00096)	0.0328
P2RI-32S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-32S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-32S [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-33S	06/13/11	0.0011 J	0.0062 J	0.254 J	0.0012 J	0.00085 JB	0.0347	0.0067	0.0228	ND(0.005)	0.0151 J	0.00003 J	0.0159 J	0.0961 J	0.00011 J	0.031	0.0781
P2RI-33S	09/16/11	0.00051 J	0.0286 J	0.692	0.0026	0.0049 J	0.0836	0.0217	0.046	ND(0.005)	0.0455	0.00019 JB	0.0567	0.0886	0.00049 J	0.117	0.255
P2RI-33S	12/07/11	ND(0.0021) UJ	0.0056 J	0.227	0.00084 J	0.00027 J	0.0181	0.0057	0.0104 J	ND(0.005)	0.0112 J	ND(0.000026) UJ	0.0165	0.0569	ND(0.00049)	0.0294	0.0699
P2RI-33S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-33D	11/04/10	ND(0.0015)	ND(0.0048)	0.043 J	ND(0.00065)	ND(0.002)	ND(0.0034)	0.003 J	0.0049 J	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0105	ND(0.0013)	ND(0.0004)	0.0048 J	0.0128 J
P2RI-33D	03/17/11	ND(0.0015) UJ	ND(0.0048)	0.0502 J	ND(0.00065) UJ	ND(0.002)	0.0042 J	ND(0.0023)	0.0076 J	ND(0.005)	ND(0.0069) UJ	ND(0.00005) UJ	0.0057 J	ND(0.0013) UJ	ND(0.0004)	0.0075 J	0.0181 J
P2RI-33D Dup	03/17/11	ND(0.0015)	ND(0.0048)	0.0367 J	ND(0.00065)	ND(0.002)	ND(0.0034)	ND(0.0023)	0.0082 J	ND(0.005)	ND(0.0069)	ND(0.00005)	0.005 J	ND(0.0013)	ND(0.0004)	0.0054 J	0.0136 J
P2RI-33D	06/13/11	ND(0.00042) UJ	ND(0.00095)	0.0116 J	ND(0.00013) UJ	ND(0.00027)	0.0012 JB	0.0037 J	0.0063 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0019 J	ND(0.00027) UJ	ND(0.000098) UJ	ND(0.00096)	0.0057 JB
P2RI-33D Dup	06/13/11	ND(0.00042) UJ	ND(0.00095)	0.0118 J	ND(0.00013) UJ	ND(0.00027)	ND(0.0011)	0.0042 J	0.0058 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0024 J	0.00038 J	ND(0.000098) UJ	ND(0.00096)	0.0066 JB
P2RI-33D	09/16/11	ND(0.0021) UJ	ND(0.0048)	0.0088	ND(0.00065)	0.0006 J	ND(0.0011)	0.0027 J	0.0053 J	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	ND(0.0025)	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0073 J
P2RI-33D Dup	09/16/11	ND(0.0021) UJ	ND(0.0048)	0.0087	ND(0.00065)	0.00034 J	0.0012 JB	0.0026 J	0.0057 J	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	ND(0.0025)	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0073 J
P2RI-34S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	0.002 J	0.0355 J	0.8 J	0.0016 J	0.0023 J	0.057	0.0171	0.0474	ND(0.005)	0.0233 J	ND(0.000056)	0.0606	0.0061 J	ND(0.0004)	0.164	0.194
P2RI-34D	03/11/11	ND(0.0015)	0.0051 J	0.0383 J	ND(0.00013)	ND(0.002)	ND(0.0034)	0.0033 J	ND(0.0027)	ND(0.005)	ND(0.0069) UJ	ND(0.00005) UJ	0.0075	0.001 JB	ND(0.00008) UJ	ND(0.0025)	ND(0.0081)
P2RI-34D	06/11/11	0.0017 J	0.003 J	0.0182 JB	ND(0.00013) UJ	ND(0.00027)	ND(0.0011)	0.0033 J	0.0021 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.005 J	0.00085 J	ND(0.000098) UJ	ND(0.00096)	0.0103 J
P2RI-34D	09/17/11	0.0031 J	ND(0.0048)	0.0147	ND(0.00065)	0.00028 J	ND(0.0011)	0.0029 J	0.0018 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0036 J	ND(0.0014)	ND(0.00049)	0.002 J	0.013 J
P2RI-35S	11/03/10	0.00076 JB	0.0727 J	1.51 J	0.0049 J	0.0039 J	0.156	0.0438	0.115	ND(0.005)	0.0569 J	ND(0.000056)	0.206	0.005 J	0.0011	0.39	0.621
P2RI-35S	06/13/11	0.0006 J	0.0031 J	0.0097 J	ND(0.00013) UJ	ND(0.00027)	0.0014 JB	0.0034 J	0.0069 JB	ND(0.005)	0.0039 J	ND(0.000026) UJ	0.0026 J	0.00028 J	ND(0.000098) UJ	ND(0.00096)	0.0122 JB
P2RI-35S Dup	06/13/11	0.0014 J	0.0022 J	0.0188 J	ND(0.00013) UJ	ND(0.00027)	0.0017 JB	0.0076	0.0111	ND(0.005)	0.0023 J	ND(0.000026) UJ	0.0143 J	0.00077 J	ND(0.000098) UJ	ND(0.00096)	0.0182 JB
P2RI-35S	09/15/11	ND(0.0021)	ND(0.0048)	0.0136 J	ND(0.00065)	0.00063 J	ND(0.0011)	0.0026 J	0.009 JB	ND(0.005)	ND(0.0022) UJ	0.000048 JB	0.0081 J	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0268
P2RI-35S	12/07/11	ND(0.0021)	ND(0.0048) UJ	0.0158 J	ND(0.00065)	ND(0.00027)	ND(0.0011)	0.0025 J	ND(0.00094)	ND(0.005)	0.0052 JB	ND(0.000026)	0.0094 J	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0133 J
P2RI-35D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	ND(0.0003)	ND(0.00095)	0.02 J	ND(0.00013)	ND(0.002)	ND(0.0034)	0.0038 J	ND(0.0027)	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0085	0.00086 J	ND(0.00008)	ND(0.0025)	0.0095 J
P2RI-36S	03/14/11	0.0014	0.00099 J	0.0247	ND(0.00013)	ND(0.002)	ND(0.0034)	0.0111	ND(0.0027) UJ	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0205	0.0012 J	ND(0.00008)	ND(0.0025)	0.0194 J
P2RI-36S	06/09/11	0.002	ND(0.00095)	0.0169 J	ND(0.00013)	ND(0.00027)	0.0011 J	0.0092	0.0082 JB	ND(0.005)	0.0108 JB	ND(0.000026)	0.0175	0.00059 J	ND(0.000098)	ND(0.00096)	0.0141 J
P2RI-36S	09/15/11	0.0037	0.0026	0.0701 J	ND(0.00013)	0.00068 J	0.006 J	0.0084	0.0131 JB	ND(0.005)	0.0179 JB	0.00005 JB	0.0152	0.00047 J	ND(0.000098)	0.0123	0.0289
P2RI-36DF [a]	03/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	ND(0.0015)	0.026 J	0.564 J	0.0013 J	ND(0.002)	0.0288	0.0187	0.0354	ND(0.005)	0.0196 J	ND(0.000056)	0.0731	0.002 J	ND(0.0004)	0.0666	0.218
P2RI-37S	03/17/11	0.00034 J	0.013	0.216 J	0.00073 J	ND(0.002)	0.0145 J	0.0106	0.0263 J	ND(0.005)	0.0077 J	ND(0.00005) UJ	0.0369	0.0012 J	0.00012 J	0.0291 J	0.107 J
P2RI-37S	06/13/11	ND(0.00042) UJ	ND(0.00095)	0.0159 J	ND(0.00013) UJ	0.0004 JB	0.0014 JB	0.0061	0.0144	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0223 J	0.00072 J	ND(0.000098) UJ	ND(0.00096)	0.0489
P2RI-37S	09/16/11	ND(0.00084) UJ	ND(0.0019)	0.018	ND(0.00026)	0.00078 J	0.0015 JB	0.005	0.0072 J	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0203	0.0017 J	ND(0.0002)	0.00096 J	0.0106 J
P2RI-37D	06/27/11	ND(0.0021)	ND(0.0048)	0.0196	ND(0.00065)	0.00064 J	ND(0.0011)	0.0041 JB	0.002 J	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0068 J	ND(0.0014)	ND(0.00049)	ND(0.00096) UJ	0.0106 J
P2RI-37D	09/16/11	0.0022 J	ND(0.0019)	0.0245	ND(0.00026)	ND(0.00027)	0.0013 JB	0.0033 J	0.0041 J	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0051	ND(0.00054)	ND(0.0002)	ND(0.00096)	0.0097 J
P2RI-37D	12/07/11	ND(0.0021) UJ	ND(0.0048)	0.0205	ND(0.00065)	ND(0.00027)	0.0011 J	0.0021 J	ND(0.00094)	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0034 J	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0086 J
P2RI-37D Dup	12/07/11	ND(0.0021)	ND(0.0048) UJ	0.0207	ND(0.00065)	ND(0.00027)	ND(0.0011)	0.0018 J	ND(0.00094)	ND(0.005)	ND(0.0022)	ND(0.000026)	ND(0.0025)	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0069 J
P2RI-37D	03/20/12	0.00049	0.0011	0.0327	ND(0.00065)	ND(0.00027)	0.0015	0.0018	0.0013	ND(0.005)	0.0074	ND(0.000026)	0.0047	ND(0.00027)	ND(0.000098)	0.00096	0.0329
P2RI-37D Dup	03/20/12	ND(0.0021)	ND(0.0048)	0.0306	ND(0.00065)	ND(0.00027)	ND(0.0011)	0.0039	0.0018	ND(0.005)	ND(0.0022)	ND(0.000026)	0.0029	ND(0.0014)	ND(0.00049)	0.0011	0.0267
P2RI-38S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	0.0005 JB	0.003	0.146	0.00036 J	ND(0.002)	0.0165	0.0056	0.0191	ND(0.005)	ND(0.0069)	ND(0.00005)	0.0239	0.308	ND(0.00008)	0.0338	0.0374
P2RI-40S	03/10/11	ND(0.003)	ND(0.0095) UJ	0.0078 J	ND(0.0013)	ND(0.002)	ND(0.0034)	0.0054	0.0106	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0239 J	0.488 J	ND(0.0008)	ND(0.0025)	ND(0.0081)
P2RI-40S	06/08/11	ND(0.0015)	0.0069 J	0.173 J	0.001 J	ND(0.01)	0.0171 J	0.0115 J	0.0451 JB	ND(0.005) R	ND(0.0345) UJ	ND(0.000026) UJ	0.0385	0.431 J	ND(0.0004) UJ	0.0304	0.0489 J
P2RI-40S	09/15/11	ND(0.0021)	ND(0.0048)	0.0199 J	ND(0.00065)	0.00063 J	0.0016 J	0.0033 J	0.0196 JB	ND(0.005)	ND(0.0022) UJ	0.000033 JB	0.0155	0.296	ND(0.00049)	0.002 J	0.0166 J
P2RI-41S [a]	11/15/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	03/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-41D	11/05/10	0.002	0.0197	0.75 J	0.00081	ND(0.002)	0.0293	0.0065	0.02	ND(0.005)	0.0257	ND(0.000056)	0.0322	0.002	ND(0.0004)	0.0825	0.124
P2RI-41D	03/11/11	0.0021 J	ND(0.0048) UJ	0.0365 J	ND(0.00065)	ND(0.002)	ND(0.0034)	0.0037 J	0.003 J	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0036 J	ND(0.0013) UJ	ND(0.0004)	0.0034 J	0.0114 J
P2RI-41D	06/11/11	0.0007 J	0.0214 J	0.507 J	0.00091 J	0.00095 J	0.0276	0.0094	0.0258	ND(0.005)	0.0141 JB	ND(0.000026) UJ	0.03 J	0.0025 J	0.0002 J	0.0747	0.106
P2RI-41D	09/17/11	ND(0.0021)	ND(0.0048)	0.0272	ND(0.00065)	ND(0.00027)	0.0016 J	0.0023 J	0.0033 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0029 J	ND(0.0014)	ND(0.00049)	0.0042 J	0.0067 J
P2RI-43S	11/03/10	ND(0.0015)	0.0482 J	0.47 J	0.0042 J	0.004 J	0.102	0.0457	0.0917	ND(0.005)	0.0449 J	ND(0.000056)	0.175	0.0531 J	0.00072 J	0.235	0.449
P2RI-43S	03/16/11	ND(0.0015) R	0.0687	0.723 J	0.0053 J	ND(0.01)	0.139 J	0.0932	0.165 J	ND(0.005)	0.101 J	0.00051 J	0.219	0.0129 J	0.00098 J	0.255 J	0.715 J
P2RI-43S	06/11/11	0.001 J	0.0029 J	0.0539 J	0.00014 J	ND(0.00027)	0.0061 J	0.0202	0.0224	ND(0.005)	0.0048 JB	0.000098 JB	0.0448 J	0.0076 J	0.00029 J	0.0063 JB	0.0335
P2RI-43S	09/19/11	ND(0.0021)	ND(0.0048)	0.0254	ND(0.00065)	ND(0.00027)	0.0035 J	0.0211	0.0182	ND(0.005) UJ	ND(0.0022)	0.00011 JB	0.0388	0.0094 J	ND(0.00049)	ND(0.00096)	0.0196 J
P2RI-43D	03/30/11	0.0016 J	0.0031	0.755	ND(0.00013)	ND(0.002)	0.0034 J	ND(0.0023)	0.0035 J	ND(0.005)	0.0078 J	ND(0.00005) UJ	0.0039	0.00088 J	ND(0.00008)	0.0092	0.0098 J
P2RI-43D	06/11/11	0.0016 J	0.0041 J	0.71 J	ND(0.00013) UJ	ND(0.00027)	0.0018 J	0.002 J	0.0032 JB	ND(0.005)	0.0059 JB	ND(0.000026) UJ	0.0078 J	0.0041 J	ND(0.000098) UJ	0.0035 JB	0.0112 J
P2RI-43D	09/19/11	ND(0.0021)	ND(0.0048)	0.984	ND(0.00065)	ND(0.00027)	0.0021 J	ND(0.00062)	0.0028 JB	ND(0.005) UJ	ND(0.0022)	ND(0.000026) UJ	ND(0.0025)	ND(0.0014)	ND(0.00049)	0.0046 J	0.0149 J
P2RI-43D	12/09/11	ND(0.0021) UJ	ND(0.0048)	0.921 J	ND(0.00065)	ND(0.00027)	0.0019 J	ND(0.00062)	0.0021 JB	ND(0.005)	0.0043 JB	ND(0.000026) UJ	ND(0.0025)	0.0015 JB	ND(0.00049)	0.0027 J	0.0103 J
P2RI-44S [a]	11/05/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44SR	06/10/11	ND(0.0021)	ND(0.0048)	0.0334 J	ND(0.00065)	ND(0.00027)	0.0029 J	0.0062	0.0124 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026)	0.0152	0.157 J	ND(0.00049)	ND(0.00096)	0.0118 J
P2RI-44SR Dup	06/10/11	ND(0.0021)	ND(0.0048)	0.0349 J	ND(0.00065)	ND(0.00027)	0.0024 J	0.0069	0.013	ND(0.005)	ND(0.0022) UJ	ND(0.000026)	0.0147	0.155 J	ND(0.00049)	ND(0.00096)	0.0126 J
P2RI-44SR	09/16/11	ND(0.0021)	ND(0.0048)	0.0346	ND(0.00065)	0.00055 J	0.0039 J	0.0064	0.0115 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0148	0.155	ND(0.00049)	0.0063	0.0141 J
P2RI-44SR Dup	09/16/11	ND(0.0021)	ND(0.0048)	0.0335	ND(0.00065)	0.00048 J	0.0037 J	0.0066	0.0113 JB	ND(0.005) R	ND(0.0022) UJ	0.000041 JB	0.0141	0.159	ND(0.00049)	0.0064	0.0145 J
P2RI-44SR	12/06/11	ND(0.0021)	ND(0.0048)	0.0192 J	ND(0.00065)	ND(0.00027)	0.0024 J	0.0031 J	ND(0.00094)	ND(0.005)	0.0048	ND(0.000026) UJ	0.0135	0.143	ND(0.00049)	0.0013 JB	0.0075 JB
P2RI-44SR	03/20/12	ND(0.0021)	ND(0.0048)	0.0421	ND(0.00065)	ND(0.00027)	0.0049	0.006	0.0048	ND(0.005)	ND(0.0022)	ND(0.000026)	0.0154	0.139	ND(0.00049)	0.0035	0.0182
P2RI-44SR Dup	03/20/12	ND(0.0021)	ND(0.0048)	0.0401	ND(0.00065)	ND(0.00027)	0.0048	0.0061	0.0051	ND(0.005)	ND(0.0022)	0.000037	0.0143	0.14	ND(0.00049)	0.0032	0.0178
P2RI-44D	03/10/11	0.0044 J	ND(0.0048) UJ	0.0577 J	ND(0.00065)	ND(0.002)	0.0052 J	0.0101	0.0069 J	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0233 J	0.0526 J	ND(0.0004)	0.007	0.0175 J
P2RI-44D	06/10/11	ND(0.0021)	ND(0.0048)	0.0321 J	ND(0.00065)	ND(0.00027)	0.0053 J	0.005	0.0051 JB	ND(0.005)	0.0072 JB	ND(0.000026)	0.0132	0.0168 J	ND(0.00049)	0.0026 J	0.0113 J
P2RI-44D	09/16/11	0.0042 J	ND(0.0048)	0.067	ND(0.00065)	0.00055 J	0.008 J	0.0043 J	0.0067 JB	ND(0.005)	ND(0.0022) UJ	0.000035 JB	0.0096 J	ND(0.0014)	ND(0.00049)	0.0117	0.0262
P2RI-44D	12/06/11	ND(0.0021)	0.0125	0.529 J	0.0018 J	0.00076 J	0.047	0.0088 J	0.0235	ND(0.005)	0.0108	ND(0.000026) UJ	0.0425	0.004 J	ND(0.00049)	0.0956	0.106
P2RI-45S	11/03/10	ND(0.0015)	0.0137 J	0.31 J	0.00086 J	ND(0.002)	0.0223	0.0106	0.0223	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0453	0.003 J	ND(0.0004)	0.0537	0.0954
P2RI-45S	03/16/11	ND(0.0015) UJ	0.0162 J	0.291 J	0.00091 J	ND(0.002)	0.0255 J	0.0223 J	0.0431 J	ND(0.005)	0.0139 J	ND(0.00005) UJ	0.053	0.0071 J	ND(0.0004)	0.0563 J	0.176 J
P2RI-45S Dup	03/16/11	ND(0.0015) UJ	0.0113 J	0.144 J	ND(0.00065) UJ	ND(0.002)	ND(0.017) UJ	0.0332 J	0.0142 J	ND(0.005)	ND(0.0069) UJ	ND(0.00005) UJ	0.0475	0.0081 J	ND(0.0004)	0.0212 J	0.0645 J
P2RI-45S	06/11/11	ND(0.0021)	ND(0.0048)	0.01 JB	ND(0.00065)	ND(0.00027)	0.0016 J	0.0122	0.014	ND(0.005)	0.0028 JB	ND(0.000026) UJ	0.0193	0.0046 J	ND(0.00049)	ND(0.00096)	0.0127 J
P2RI-45S	09/19/11	ND(0.0021)	ND(0.0048)	0.0089 J	ND(0.00065)	ND(0.00027)	0.0017 J	0.0162	0.0146	ND(0.005) UJ	0.004 J	ND(0.000026) UJ	0.0249	0.0035 J	ND(0.00049)	ND(0.00096)	0.0278
P2RI-45D	06/28/11	ND(0.0042)	0.349	3.15	0.0241	0.0083 J	0.392	0.345	0.35	ND(0.005) R	0.213	0.0016 JB	1.19	0.0454	0.0029 J	0.783	1.58
P2RI-45D	09/19/11	ND(0.0021)	0.0227 J	0.309	0.0016 J	0.0015 J	0.034	0.068	0.0402	ND(0.005) UJ	0.0213	ND(0.000026) UJ	0.177	0.0026 J	ND(0.00049)	0.074	0.24
P2RI-45D	12/09/11	ND(0.0042)	ND(0.0095)	0.0415	ND(0.00065)	ND(0.00027)	0.0056 J	0.0472	0.0349	ND(0.005) R	0.0024 JB	ND(0.000026)	0.115	ND(0.0027) UJ	ND(0.00098)	0.0042 J	0.163
P2RI-45D	03/22/12	ND(0.0021)	0.0061	0.0214	ND(0.00065)	ND(0.00027)	ND(0.0055)	0.0627	ND(0.0047)	ND(0.005)	0.0103	ND(0.000026)	0.0773	ND(0.0014)	ND(0.00049)	ND(0.0048)	0.0648
P2RI-46S	11/03/10	ND(0.0015)	0.0134 J	0.0777 J	ND(0.00065)	ND(0.004)	ND(0.017)	0.0353	0.0281 J	ND(0.005)	ND(0.0138) UJ	0.000092 J	0.128	0.197 J	0.001 J	ND(0.0125)	0.0429
P2RI-46S	03/15/11	ND(0.003)	0.0296	0.291	0.0014 J	ND(0.01)	0.0606 J	0.0416	0.0838	ND(0.005) R	ND(0.0345)	ND(0.00005) UJ	0.113	0.125	ND(0.0008)	0.102	0.215
P2RI-46S	06/11/11	ND(0.0021) UJ	ND(0.0048)	0.0217 JB	ND(0.00065) UJ	ND(0.0014)	0.0091 J	0.0165 J	0.0234 JB	ND(0.005)	ND(0.011) UJ	0.000061 JB	0.0713 J	0.114 J	ND(0.00049) UJ	ND(0.0048)	0.0649 J
P2RI-46S	09/19/11	ND(0.0021)	ND(0.0048)	0.0205 JB	ND(0.00065)	ND(0.0014)	0.0091 J	0.0232 J	0.0425 JB	ND(0.005) UJ	0.0154 J	ND(0.000026) UJ	0.048	0.197	ND(0.00049)	ND(0.0048)	0.0194 J
P2RI-46D [a]	12/16/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFL	12/16/10	ND(0.0015) UJ	0.52	1.32	0.0227	0.0078	0.713	0.263	0.653	ND(0.005) UJ	0.321	ND(0.00005) UJ	0.949	0.0333 J	0.0102	1.34	2.66
P2RI-46DFL [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFL [a]	06/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFL [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFU	12/09/11	ND(0.0021)	0.553	1.32	0.0223	0.0415	1.25	0.44	0.975	ND(0.005)	0.616	0.0026	1.41	0.0311	0.01	2.29	4.92
P2RI-46DFU [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFU [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFU [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47S	11/05/10	ND(0.0006)	0.0125 J	0.233 J	0.00082 J	ND(0.002)	0.0207	0.0095	0.0175	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0265	0.0025 J	ND(0.00016)	0.0445	0.0784
P2RI-47S	03/17/11	ND(0.0003) UJ	0.0214	0.453 J	0.0021 J	ND(0.002)	0.0402 J	0.0164	0.0369 J	ND(0.005)	0.0218 J	0.000073 J	0.0421	0.0028 J	0.0002 J	0.0703 J	0.157 J
P2RI-47S	06/14/11	ND(0.00042)	ND(0.00095)	0.0237	ND(0.00013)	ND(0.00027)	0.002 JB	0.0014 J	0.0073 J	ND(0.005)	0.0028 J	ND(0.000026)	0.0081	0.001 J	ND(0.000098)	ND(0.00096)	0.0445 JB
P2RI-47S	09/20/11	ND(0.0021)	ND(0.0048)	0.0229	ND(0.00065)	ND(0.00027)	0.0023 J	0.0015 J	0.0146	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0074 JB	ND(0.0014) UJ	ND(0.00049)	ND(0.00096)	0.0276
P2RI-47DF [a]	03/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	06/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-48S	11/03/10	0.0017 JB	0.0127 J	0.137 J	0.00073 J	ND(0.01)	ND(0.017)	0.0115 J	0.0246 J	ND(0.005)	ND(0.0345) UJ	ND(0.000056)	0.0712	0.0053 J	ND(0.0004)	0.0164 J	0.0656 J
P2RI-48S	03/15/11	ND(0.003)	ND(0.0095)	0.0267	ND(0.0013)	ND(0.01)	ND(0.017)	ND(0.0115)	0.0192 J	ND(0.005) R	ND(0.0345)	ND(0.00005) UJ	0.0265	0.0029 J	ND(0.0008)	ND(0.0125)	ND(0.0405)
P2RI-48S	06/14/11	ND(0.0021)	0.0067 J	0.0134 J	ND(0.00065)	ND(0.0014)	0.0056 JB	0.0221 J	0.0421 J	ND(0.005)	0.0184 J	ND(0.000026)	0.0409	0.0032 J	ND(0.00098)	ND(0.0048)	0.0365 JB
P2RI-48S	09/17/11	ND(0.0021)	0.0065 J	0.0209 J	ND(0.00065)	ND(0.0014)	0.013 J	0.0082 J	0.0325 JB	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0321	0.0027 J	ND(0.00049)	ND(0.0048)	0.0202 J
P2RI-49S	11/05/10	0.0015 J	0.012 J	0.0864 J	ND(0.00065)	ND(0.01)	ND(0.017)	0.0159 J	0.0318 J	ND(0.005)	ND(0.0345) UJ	ND(0.000056)	0.0869	0.0065 J	ND(0.0004)	ND(0.0125)	0.0602 J
P2RI-49S	12/09/10	ND(0.015)	0.0079	0.0373	ND(0.00013)	ND(0.01)	ND(0.017)	0.0182 J	0.0252 J	ND(0.005)	ND(0.0345)	ND(0.00005)	0.0699	0.0103	0.00017 J	ND(0.0125)	0.0493 J
P2RI-49S	03/11/11	ND(0.003)	0.0189 J	0.176 J	ND(0.0013)	ND(0.01)	0.0179 J	0.0195 J	0.0237 J	ND(0.005)	ND(0.0345)	ND(0.00005) UJ	0.0959 J	0.0079 J	ND(0.0008)	0.0265	0.0668 J
P2RI-49S	06/14/11	ND(0.0042)	ND(0.0048)	0.0196	ND(0.00065)	ND(0.0014)	0.0082 JB	0.0205 J	0.0377	ND(0.005)	0.0129 J	0.00003 J	0.0761	0.0037 J	ND(0.00098)	ND(0.00096)	0.0382 JB
P2RI-50S	12/09/10	0.001 JB	0.0118	0.243	0.00098	ND(0.002)	0.0273	0.0341	0.0313	ND(0.005)	0.388	ND(0.00005)	0.0497	0.0126	0.00011 J	0.0558	0.11
P2RI-50S	03/15/11	ND(0.003)	ND(0.0095)	0.0535	ND(0.0013)	ND(0.002)	0.0055 J	0.0329	0.0163	ND(0.005) R	0.0494	ND(0.00005) UJ	0.0248	0.0026 J	ND(0.0008)	0.0078	0.0288
P2RI-50S	06/11/11	ND(0.0021)	ND(0.0048)	0.0489	ND(0.00065)	ND(0.00027)	0.0041 J	0.0391	0.0236	ND(0.005)	0.207	ND(0.000026) UJ	0.0274	0.0016 J	ND(0.00049)	0.0047 JB	0.0343
P2RI-50S	09/16/11	ND(0.0021)	ND(0.0048)	0.025	ND(0.00065)	0.00097 J	0.0034 J	0.0436	0.0214	ND(0.005) R	0.0579	0.000063 JB	0.0328	0.0515	ND(0.00049)	0.0028 J	0.0592
P2RI-50S	05/21/12	ND(0.0021) UJ	0.0054 J	0.0231	ND(0.00065)	0.00091 JB	0.0033 J	0.0544	0.0121 JB	ND(0.005)	0.0701	0.000027 JB	0.0435 J	0.0776	ND(0.00049)	ND(0.00096)	0.0356

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-51S	12/16/10	ND(0.003)	0.0841	1.01	0.0094	0.007	0.156	0.0701	0.23	ND(0.005)	0.108	ND(0.00005)	0.23	0.768 J	0.0011 J	0.31	0.706
P2RI-51S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-51S	06/09/11	ND(0.0021)	0.0117 J	0.279 J	0.00077 J	0.00029 J	0.0069 J	0.0093	0.046	ND(0.005)	0.0105 JB	ND(0.000026)	0.0272	0.793 J	ND(0.00049)	0.0121	0.0331
P2RI-51S	09/12/11	0.001 J	0.0028 J	0.0247 J	ND(0.00013)	ND(0.00027)	0.0018 JB	ND(0.00062)	0.037	ND(0.005)	ND(0.0022)	0.000044 JB	0.0076	0.215	ND(0.000098)	0.0013 J	0.0192 J
P2RI-51S	12/03/11	ND(0.0021)	0.0997	0.857	0.0091	0.0114	0.243	0.104	0.309	ND(0.005)	0.136	0.000039 J	0.313 J	0.517	0.0018 J	0.462	1.04
P2RI-51S	03/17/12	ND(0.0021)	ND(0.0048)	0.0304	ND(0.00013)	ND(0.00027)	0.0041 J	0.0013 J	0.0243	ND(0.005)	0.0286	0.000048 JB	0.0082 J	0.381	ND(0.00049)	0.0012 J	0.0169 JB
P2RI-51S	05/17/12	ND(0.0021)	ND(0.0048)	0.019 J	ND(0.00065)	0.00081 JB	0.0019 J	0.00084 J	0.0318	ND(0.005)	0.0027 J	0.000038 JB	0.006 J	0.23	ND(0.00049)	ND(0.00096)	0.0306
P2RI-52S [a]	06/28/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	12/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52DF	06/28/11	ND(0.00042)	0.146	5.9	0.0067	0.0124 J	0.864	0.177	0.395	ND(0.01)	0.189	0.0049 JB	0.321	0.0086	0.0017	1.08	1.88
P2RI-52DF [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52DF [a]	12/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-53S	06/15/11	ND(0.0021)	0.0067 J	0.0206 J	ND(0.00065)	0.0021 J	0.0067 J	0.0495	0.011 JB	ND(0.005)	ND(0.011)	0.000071 JB	0.0621	0.0058 J	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-53S	09/16/11	ND(0.0021)	0.0053 J	0.0107 J	ND(0.00065)	ND(0.0014)	0.0128 J	0.0478	0.0186 JB	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0576	0.0045 J	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-53S Dup	09/16/11	ND(0.0021)	0.0057 J	0.0128 J	ND(0.00065)	ND(0.0014)	0.0116 J	0.0497	0.0158 JB	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0554	0.0045 J	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-53S	12/08/11	ND(0.0021) UJ	ND(0.0048)	0.0113	ND(0.00065)	ND(0.00027)	0.0039 J	0.043	0.0035 JB	ND(0.005)	ND(0.0022)	0.000031 JB	0.0624	0.0039 J	ND(0.00049)	ND(0.00096)	0.0079 J
P2RI-53S Dup	12/08/11	ND(0.0021) UJ	0.005 J	0.0108	ND(0.00065)	ND(0.00027)	ND(0.0055)	0.0441	0.0069 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0667	0.0048 J	ND(0.00049)	ND(0.0048)	0.0083 J
P2RI-53S	03/22/12	ND(0.0021)	0.0071	0.0135	ND(0.00065)	ND(0.0014)	0.0072	0.0471	ND(0.0047)	ND(0.005)	0.0216	0.000034	0.0653	0.0048	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-54SU	06/15/11	ND(0.0021)	0.0069 J	0.0208 J	ND(0.00065)	0.0028 J	0.0144 J	0.0209 J	0.0199 JB	ND(0.005)	0.023 JB	ND(0.000026)	0.0349	0.0026 J	ND(0.00049)	ND(0.0048)	0.0323 JB
P2RI-54SU	09/16/11	ND(0.0021)	0.007 J	0.0225 J	ND(0.00065)	ND(0.0014)	0.0125 J	0.0183 J	0.0254 JB	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0317	0.0031 J	ND(0.00049)	ND(0.0048)	0.0579 J
P2RI-54SU	12/08/11	ND(0.0021) UJ	0.005 J	0.0204	ND(0.00065)	ND(0.00027)	0.0097 J	0.0158	0.0189 J	ND(0.005)	0.0028 J	ND(0.000026) UJ	0.03	0.002 J	ND(0.00049)	ND(0.0048)	0.0727
P2RI-54SU	03/20/12	ND(0.0042)	ND(0.0095)	0.0152	ND(0.0013)	ND(0.0014)	ND(0.0055)	0.0159	0.0269	ND(0.005)	ND(0.011)	ND(0.000026)	0.0294	0.0035	ND(0.00098)	ND(0.0048)	0.0651
P2RI-54SM	06/15/11	ND(0.0021)	ND(0.0048)	0.0208	ND(0.00065)	0.00077 J	0.0018 J	0.0033 JB	0.0049 J	ND(0.005)	ND(0.0022)	ND(0.000026)	0.0025 J	ND(0.0014)	ND(0.00049)	0.0012 J	0.0166 JB
P2RI-54SM	09/16/11	ND(0.0021)	0.0053 J	0.0155	ND(0.00065)	0.0013 J	0.0019 J	0.0036 J	0.0062 JB	ND(0.005)	ND(0.0022) UJ	0.00004 JB	ND(0.0025)	ND(0.0014)	ND(0.00049)	0.0015 J	0.008 J
P2RI-54SM	03/20/12	ND(0.0021)	0.0048	0.0129	ND(0.00065)	0.00052	0.0021	0.0029	ND(0.00094)	ND(0.005)	ND(0.0022)	ND(0.000026)	ND(0.0025)	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0089
P2RI-54SM	05/20/12	ND(0.0021)	0.0061 J	0.0134	ND(0.00065)	ND(0.00027)	0.0014 JB	0.0013 J	0.0059 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	ND(0.0025)	ND(0.0014)	ND(0.00049) UJ	ND(0.00096)	0.0104 J
P2RI-54SM Dup	05/20/12	ND(0.0021)	0.0076 J	0.0137	ND(0.00065)	ND(0.00027)	0.0012 JB	0.001 J	0.002 JB	ND(0.005)	ND(0.0022) UJ	ND(0.000026) UJ	0.0026 J	ND(0.0014)	ND(0.00049) UJ	ND(0.00096)	0.0093 J
P2RI-54SL	06/27/11	ND(0.00084)	0.0027 J	0.0302	ND(0.00026)	0.00075 J	0.0021 J	0.0026 JB	0.0066 J	ND(0.005)	0.0074 J	ND(0.000026) UJ	0.0071	ND(0.00054)	ND(0.0002)	0.0024 JB	0.0082 J
P2RI-54SL	09/16/11	ND(0.0021)	ND(0.0048)	0.0212	ND(0.00065)	0.00076 J	0.0027 J	0.0023 J	0.0051 JB	ND(0.005)	0.0044 JB	0.000037 JB	ND(0.0025)	ND(0.0014)	ND(0.00049)	0.0033 J	0.0084 J
P2RI-54SL	03/20/12	0.00061	0.0071	0.0897	0.0084	0.0004	0.017	0.0039	0.207	ND(0.005)	0.0158	ND(0.000026)	0.0108	0.00037	ND(0.000098)	0.0096	0.209
P2RI-54SL	05/20/12	ND(0.0021)	0.0054 J	0.0227	ND(0.00065)	ND(0.00027)	0.0036 J	0.0011 J	0.0036 J	ND(0.005)	0.0044 J	ND(0.000026) UJ	ND(0.0025)	ND(0.0014)	ND(0.00049) UJ	0.002 J	0.0161 J
P2RI-55S [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55S	03/20/12	0.0012	0.0061	0.211	0.00059	ND(0.00027)	0.0074	0.0112	0.0027	ND(0.005)	0.0284	ND(0.000026)	0.0516	0.137	ND(0.000098)	0.0177	0.0453
P2RI-55S	05/20/12	ND(0.0021)	0.0128	0.349	0.0012 J	ND(0.00027)	0.0102 JB	0.0138	0.0122 JB	ND(0.005)	0.0138 J	ND(0.000026) UJ	0.0475	0.137	ND(0.00049) UJ	0.0219	0.0706
P2RI-55DF [a]	11/30/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	05/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	05/16/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	0.0119	0.0098 J	0.052	ND(0.00065)	ND(0.00027)	0.0036 J	0.0021 J	0.0036 JB	ND(0.005)	0.0235	ND(0.000026)	0.0072 J	0.0146	ND(0.00049)	0.0075	0.0115 J
P2RI-56DF	03/22/12	ND(0.0042)	ND(0.0095)	0.0293	ND(0.0013)	ND(0.00027)	ND(0.0011)	0.0029	0.0038	ND(0.005)	0.0043	ND(0.000026)	ND(0.005)	ND(0.0027)	ND(0.00098)	0.0022	0.0142
P2RI-56DF	05/21/12	ND(0.0042) UJ	0.01 J	0.0289	ND(0.0013)	0.0004 JB	ND(0.0011)	0.0056	0.0036 JB	ND(0.005)	0.0025 JB	ND(0.000026) UJ	ND(0.005)	ND(0.0027)	ND(0.00098)	0.002 J	0.0074 J
P2RI-57S	12/07/11	ND(0.0021) UJ	ND(0.0048)	0.172	ND(0.00065)	ND(0.00027)	0.0085 J	0.0025 J	0.0037 JB	ND(0.005)	0.0044 J	ND(0.000026) UJ	0.011	0.0017 J	ND(0.00049)	0.0191	0.028
P2RI-57S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-57S	05/20/12	ND(0.0021)	ND(0.0048)	0.0352	ND(0.00065)	ND(0.00027)	0.0012 JB	ND(0.00062)	0.002 JB	ND(0.005)	0.0025 J	ND(0.000026) UJ	0.0025 J	ND(0.0014)	ND(0.00049) UJ	ND(0.00096)	0.0102 J
P2RI-58S	12/08/11	ND(0.0021) UJ	0.0126 J	0.158	ND(0.00065) R	ND(0.0014)	0.0148 J	0.019 J	0.0306 J	ND(0.005)	0.023 J	ND(0.000026) UJ	0.0577	0.0026 J	ND(0.00049)	0.0238 J	0.065 J
P2RI-58S	03/20/12	ND(0.0021)	0.0059	0.0226	ND(0.00065)	ND(0.0014)	0.0082	0.026	0.0191	ND(0.005)	ND(0.011)	ND(0.000026)	0.0502	0.0036	ND(0.00049)	ND(0.0048)	0.0233
P2RI-58S	05/20/12	ND(0.0021)	ND(0.0048)	0.0178 J	ND(0.00065)	ND(0.0014)	0.0098 JB	0.015 J	0.0294 J	ND(0.005)	ND(0.011)	0.000028 JB	0.0443	0.0028 J	ND(0.00049) UJ	0.0061 J	0.0323 J
P2RI-59S	12/08/11	ND(0.0021) UJ	ND(0.0048)	0.0328	ND(0.00065) R	ND(0.0014)	0.0127 J	ND(0.0031)	0.0218 J	ND(0.005)	0.0194 J	ND(0.000026) UJ	0.0531	0.003 J	ND(0.00049)	ND(0.0048)	ND(0.016)
P2RI-59S	03/20/12	ND(0.0042)	ND(0.0095)	0.0264	ND(0.0013)	ND(0.0014)	0.0193	0.0119	0.0195	ND(0.005)	ND(0.011)	ND(0.000026)	0.0529	0.004	ND(0.00098)	ND(0.0048)	0.0193
P2RI-59S	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0249 J	ND(0.0013)	ND(0.0014)	0.0105 J	0.0036 J	0.0347 J	ND(0.005)	ND(0.011)	ND(0.000026) UJ	0.0391 J	0.006 J	ND(0.00098)	0.0061 J	ND(0.016)
P2RI-59S Dup	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0251	ND(0.0013)	0.002 JB	0.0084 JB	ND(0.0031)	0.0293 J	ND(0.005)	ND(0.011)	ND(0.000026) UJ	0.0407 J	0.0032 J	ND(0.00098)	0.0056 J	ND(0.016)
P2RI-60S	12/07/11	ND(0.0021)	ND(0.0048) UJ	0.0452	ND(0.00065)	ND(0.00027)	0.0039 J	0.0124	0.0067 JB	ND(0.005) R	0.0036 JB	ND(0.000026)	0.0268	ND(0.0014)	ND(0.00049)	0.0032 J	0.0298
P2RI-60S Dup	12/07/11	ND(0.0021)	ND(0.0048) UJ	0.0359	ND(0.00065)	ND(0.00027)	0.0033 J	0.0127	0.0071 JB	ND(0.005) R	ND(0.0022)	ND(0.000026)	0.0263	0.0015 J	ND(0.00049)	0.0024 J	0.0285
P2RI-60S	03/21/12	0.0006	0.0029	0.0133	ND(0.0013)	ND(0.00027)	0.0014	0.0084	0.0051	ND(0.005)	0.0195	ND(0.000026)	0.0233	0.0014	ND(0.000098)	0.0012	0.0187
P2RI-60S Dup	03/21/12	0.00067	0.0025	0.0139	ND(0.0013)	ND(0.00027)	0.0019	0.0087	0.0051	ND(0.005)	0.0171	ND(0.000026)	0.0233	0.0016	ND(0.000098)	ND(0.00096)	0.0203
P2RI-60S	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0221	ND(0.0013)	0.00046 JB	0.0026 J	0.0112	0.0103 JB	ND(0.005)	0.0027 JB	ND(0.000026) UJ	0.0227 J	ND(0.0027)	ND(0.00098)	ND(0.00096)	0.0237
P2RI-60S Dup	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0215	ND(0.0013)	0.00073 JB	0.0023 J	0.0111	0.011 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0255 J	ND(0.0027)	ND(0.00098)	ND(0.00096)	0.0238
P2RI-61S	12/08/11	ND(0.0021) UJ	ND(0.0048)	0.0118	ND(0.00065)	ND(0.00027)	0.003 J	0.0018 J	0.008 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0105	0.0066 J	ND(0.00049)	0.0012 J	0.0134 J
P2RI-61S	03/21/12	0.00044	0.0058	0.0346	ND(0.0013)	ND(0.00027)	0.0034	0.0015	0.0075	ND(0.005)	0.0193	ND(0.000026)	0.0153	0.0106	ND(0.000098)	0.0064	0.019
P2RI-61S Dup	03/21/12	ND(0.00042)	0.0053	0.0298	ND(0.0013)	ND(0.00027)	0.0045	0.0019	0.0073	ND(0.005)	0.0208	ND(0.000026)	0.017	0.01	ND(0.000098)	0.0054	0.02
P2RI-61S	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0657	ND(0.0013)	0.00054 JB	0.0067 J	0.0043 J	0.0148 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0165 J	0.0077 J	ND(0.00098)	0.0081	0.0297
P2RI-62S	12/08/11	ND(0.0021) UJ	0.0171 J	0.455	0.0017 J	0.0014 J	0.0378	0.0175	0.0442	ND(0.005)	0.0302	ND(0.000026) UJ	0.0618	0.0038 J	ND(0.00049)	0.0718	0.21
P2RI-62S	03/22/12	ND(0.00042)	0.0014	0.0161	ND(0.00013)	ND(0.00027)	0.0024	0.0013	0.0156	ND(0.005)	0.0147	ND(0.000026)	0.0087	0.0024	ND(0.000098)	ND(0.00096)	0.0337
P2RI-62S	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0173	ND(0.0013)	ND(0.00027)	0.0025 J	0.0012 J	0.014 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	0.0089 J	ND(0.0027)	ND(0.00098)	ND(0.00096)	0.0288

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
P2RI-63S [a]	12/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-63S	03/21/12	ND(0.0042)	ND(0.0095)	0.0278	ND(0.0013)	ND(0.0014)	ND(0.0055)	0.0104	0.0327	ND(0.005)	0.0152	ND(0.000026)	0.0548	0.0074	ND(0.00098)	ND(0.0048)	ND(0.016)
P2RI-63S	05/20/12	ND(0.0084)	ND(0.019)	0.0481	ND(0.0026)	ND(0.0014)	0.0066 J	0.0101 J	0.0416 J	ND(0.005)	ND(0.011)	0.000047 JB	0.0588	0.0085 J	ND(0.002) UJ	0.0065 J	0.0235 J
GW-A	03/09/11	ND(0.0015)	0.0262 J	0.283 J	0.0023 J	ND(0.002)	0.115	0.0314	0.0539	ND(0.005)	0.0335	ND(0.00005)	0.0626 J	0.0068 J	ND(0.0004)	0.0449	0.118
GW-A	06/27/11	ND(0.0021)	0.82	18.6	0.0525	0.0288	2.35	0.619	1.4	--	0.617	0.0042 JB	2.05	0.0489	0.006	4.41	6.21
GW-A [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-A	12/06/11	ND(0.0021)	0.21	0.562 J	0.0137	0.0088	0.448	0.102 J	0.257	--	0.121 J	0.001	0.509	0.0135	0.0017 J	0.93	1.1
GW-C-24	03/09/11	0.0043 J	0.0283 J	0.0616 J	ND(0.0013)	ND(0.002)	0.0054 J	0.0062	0.0133	ND(0.005)	ND(0.0069)	ND(0.00005)	0.0092 J	0.0131 J	ND(0.0008)	0.0244	0.0303
GW-C-24	06/07/11	0.0042 J	0.0115	0.025	ND(0.00065)	ND(0.01)	ND(0.017)	ND(0.0115)	0.0107 J	ND(0.005)	ND(0.0345)	ND(0.000026)	0.0028 J	0.0019 J	ND(0.00049)	0.0086 J	ND(0.0405)
GW-C-24	09/14/11	0.0118	0.0131 J	0.0267 J	ND(0.0013)	0.00045 J	ND(0.0055)	0.0013 J	0.0213 JB	ND(0.005) UJ	ND(0.0022) UJ	0.000033 JB	ND(0.005)	ND(0.0027)	ND(0.00098)	0.0076 J	0.018 J
GW-C-24	12/06/11	0.0118	0.0096 J	0.0446 J	ND(0.0013)	ND(0.00027)	0.0031 J	ND(0.00062) UJ	0.0217	ND(0.005)	0.0053	ND(0.000026) UJ	0.0055 J	ND(0.0027)	ND(0.00049)	0.0071 JB	0.0602
GW-C-25	06/07/11	ND(0.003)	0.0197 J	0.329 J	ND(0.0013)	ND(0.01)	0.0489 J	0.0462	0.0394 J	--	ND(0.0345) UJ	ND(0.000026) UJ	0.0899	0.0028 J	ND(0.0008) UJ	0.059	0.149
GW-C-25	09/12/11	ND(0.0021)	0.016 J	0.087 J	0.00075 J	0.00065 JB	0.0138 JB	0.0398	0.0158	ND(0.005)	0.0029 J	0.000054 JB	0.106 J	0.0036 J	ND(0.00049)	0.0095	0.0457
GW-C-25	12/05/11	ND(0.0021)	0.0415	0.331 J	0.0039 J	0.0018 J	0.0543 J	0.0539 J	0.0268 J	ND(0.005)	0.0272 J	0.00017 JB	0.159	0.0044 J	ND(0.00049)	0.0692	0.171
GW-C-25	03/19/12	ND(0.0042)	0.01	0.106	ND(0.0013)	ND(0.0014)	0.0164	0.0611	0.0047	ND(0.005)	ND(0.011)	ND(0.000026)	0.185	0.0038	ND(0.00098)	0.0059	0.071
GW-C-29	10/21/10	ND(0.0006)	0.0044	0.0871 J	0.0003 J	ND(0.002)	0.0092 J	0.0074	0.0118	ND(0.005) UJ	ND(0.0069) UJ	ND(0.000046)	0.0325	0.197	ND(0.00016)	0.0172	0.0408
GW-C-29	03/14/11	ND(0.003)	ND(0.0095)	0.0208	ND(0.0013)	ND(0.002)	ND(0.0034)	0.0068	0.0032 JB	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0245	0.115	ND(0.0008)	ND(0.0025)	0.0103 J
GW-C-29	06/08/11	ND(0.0015)	ND(0.0048)	0.01 J	ND(0.00065)	ND(0.01)	ND(0.017)	ND(0.0115)	0.0269 JB	ND(0.005) R	ND(0.0345) UJ	ND(0.000026) UJ	0.0297	0.213 J	ND(0.0004) UJ	ND(0.0125)	ND(0.0405)
GW-C-29	09/15/11	ND(0.0021)	ND(0.0048)	0.0108 J	ND(0.00065)	0.0026 J	0.0083 J	0.0162 J	0.0094 JB	ND(0.005)	ND(0.011) UJ	0.000044 JB	0.0201	0.11 J	ND(0.00049)	ND(0.0048)	0.0207 J
GW-C-29 Dup	09/15/11	ND(0.0042)	ND(0.0095)	0.0172 J	ND(0.0013)	0.00062 J	ND(0.0055)	0.0079	0.0058 JB	ND(0.005)	ND(0.0022) UJ	0.000041 JB	0.0232	0.149 J	ND(0.00098)	ND(0.0048)	0.0093 J
GW-C-45	11/03/10	ND(0.0015)	0.0101 J	0.245 J	0.0013 J	ND(0.002)	0.0195	0.0213	0.021	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.103	0.0105 J	ND(0.0004)	0.0415	0.114
GW-C-45	03/09/11	ND(0.0015) UJ	0.0515 J	0.0545 J	0.0019 J	ND(0.002)	0.005 J	0.0118	0.0103	ND(0.005)	ND(0.0069)	ND(0.00005)	0.161 J	0.0131	ND(0.0004)	ND(0.0025)	0.0407
GW-C-45	06/08/11	ND(0.0021)	0.0103 J	0.245 J	0.00084 J	ND(0.00027)	0.0096 J	0.0319	0.0242	ND(0.005)	0.0105 JB	ND(0.000026)	0.0896	0.0044 J	ND(0.00049)	0.0153	0.0647
GW-C-45	09/14/11	ND(0.0021)	ND(0.0048)	0.0318 J	ND(0.00065)	0.0025 J	0.0062 J	0.0067 J	0.0239 JB	ND(0.005) R	ND(0.011) UJ	0.000027 JB	0.0511	0.0113	ND(0.00049)	0.0112 J	0.0854 J
GW-C-46S	03/09/11	ND(0.003) UJ	0.0099 J	0.116 J	ND(0.0013)	ND(0.002)	0.0091 J	0.0202	0.0282 J	ND(0.005)	0.0084 J	0.00006	0.0354 J	ND(0.0025)	0.0019 J	0.0115 J	0.0692
GW-C-46S Dup	03/09/11	ND(0.003) UJ	0.0119 J	0.248 J	ND(0.0013)	ND(0.002)	0.0096 J	0.0259	0.0823 J	ND(0.005)	0.012 J	0.00012	0.0419 J	ND(0.0025)	0.0017 J	0.0156 J	0.0733
GW-C-46S	06/08/11	ND(0.003)	ND(0.0095)	0.0762 J	ND(0.0013)	ND(0.01)	ND(0.017)	0.0281	0.0247 JB	ND(0.005) R	ND(0.0345) UJ	0.000064 JB	0.0492	ND(0.0025) UJ	ND(0.0008) UJ	ND(0.0125)	ND(0.0405)
GW-C-46S	09/14/11	ND(0.0021)	ND(0.0048)	0.0134 J	ND(0.00065)	0.002 J	ND(0.0055)	0.0274	0.0154 JB	ND(0.005) R	ND(0.011) UJ	0.000047 JB	0.0306	ND(0.0014)	ND(0.00049)	ND(0.0048)	0.0646 J
GW-C-46S	12/06/11	ND(0.0021)	ND(0.0048)	0.0248 J	ND(0.0013)	ND(0.00027)	0.0024 J	0.016 J	0.0038 J	ND(0.005)	0.0058	ND(0.000026) UJ	0.0344	ND(0.0014)	ND(0.00049)	ND(0.00096)	0.0531
GW-C-46DF	03/09/11	ND(0.0015) UJ	1.37 J	0.572 J	0.0735	ND(0.01)	1.41	0.82	1.7	0.012	1.14	0.0012	2.31 J	0.0454	0.0136	2.37	7.04
GW-C-46DF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-46DF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-46DF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47S	11/03/10	ND(0.0015)	0.0079 J	0.171 J	0.00078 J	ND(0.002)	0.0144 J	0.0173	0.0167	ND(0.005)	ND(0.0069) UJ	ND(0.000056)	0.0932	0.142 J	ND(0.0004)	0.029	0.0738
GW-C-47S	03/14/11	ND(0.003)	0.0547	0.324	0.0036 J	0.0038 J	0.104	0.0497	0.0883	ND(0.005)	0.0446	ND(0.00005) UJ	0.152	0.125	ND(0.0008)	0.242	0.501
GW-C-47S	06/08/11	ND(0.0015)	0.0086 J	0.19 J	0.00086 J	ND(0.01)	0.019 J	0.0531	0.0416 JB	ND(0.005) R	ND(0.0345) UJ	0.000045 JB	0.0851	0.143 J	ND(0.0004) UJ	0.0293	0.0645 J
GW-C-47S	12/06/11	ND(0.0021)	0.0086 J	0.248 J	ND(0.0013)	0.00045 J	0.0176	0.0168 J	0.0162	ND(0.005)	0.0112	ND(0.000026) UJ	0.0643	0.112	ND(0.00049)	0.037	0.076
GW-C-47DF [a]	03/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47DF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47DF [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-48	03/11/11	ND(0.006)	ND(0.019) UJ	0.0692 J	ND(0.0026)	ND(0.01)	0.01 J	0.0452	0.0186	ND(0.005)	ND(0.0345)	ND(0.00005) UJ	0.16 J	0.0745 J	ND(0.0016)	ND(0.0125)	0.123
GW-C-48 Dup	03/11/11	ND(0.003)	ND(0.0095) UJ	0.0613 J	ND(0.0013)	ND(0.01)	0.0086 J	0.0523	0.0168	ND(0.005)	ND(0.0345)	ND(0.00005) UJ	0.189 J	0.113 J	ND(0.0008)	ND(0.0125)	0.143
GW-C-48	06/11/11	ND(0.0021)	ND(0.0048)	0.0318	ND(0.00065)	0.0022 J	ND(0.0055)	0.0352	0.0236 JB	ND(0.005)	ND(0.011)	0.000065 JB	0.145	0.101	ND(0.00049)	ND(0.0048)	0.0966 J
GW-C-48 Dup	06/11/11	ND(0.0021)	ND(0.0048)	0.0308	ND(0.00065)	0.0021 J	ND(0.0055)	0.037	0.0218 JB	ND(0.005)	ND(0.011)	0.00006 JB	0.15	0.101	ND(0.00049)	ND(0.0048)	0.0956 J
GW-C-48	09/15/11	ND(0.0042)	ND(0.0095)	0.0405 J	ND(0.0013)	0.0021 J	0.0065 J	0.0315	0.0265 JB	ND(0.005)	ND(0.011) UJ	0.000096 JB	0.115	0.0498	ND(0.00098)	0.0154 J	0.0953 J
GW-C-48	12/06/11	ND(0.0021)	ND(0.0048)	0.0191 J	ND(0.0013)	ND(0.0014)	0.0073 J	0.0198 J	0.0094 J	ND(0.005)	ND(0.011) UJ	ND(0.000026) UJ	0.11	0.052	ND(0.00049)	ND(0.0048)	0.0502 J
GW-C-48 Dup	12/06/11	ND(0.0021)	ND(0.0048)	0.0183 J	ND(0.0013)	ND(0.0014)	0.0068 J	0.0198 J	0.0069 J	ND(0.005)	ND(0.011) UJ	ND(0.000026) UJ	0.105	0.047	ND(0.00049)	ND(0.0048)	0.0465 J
GW-CS	03/11/11	ND(0.003)	0.114 J	0.345 J	0.0072	0.0178	0.184	0.206	0.206	--	0.0807	0.000062 JB	0.482 J	0.0108 J	0.0013 J	0.369	0.816
GW-CS	06/08/11	ND(0.0015)	0.0152 J	0.171 J	0.001 J	ND(0.002)	0.0186	0.0471	0.033 JB	ND(0.005) R	0.013 J	ND(0.000026) UJ	0.137	0.0098 J	ND(0.0004) UJ	0.0422	0.182
GW-CS	09/14/11	ND(0.0042)	0.0436	0.572 J	0.0027 J	0.0034 J	0.0615	0.0599	0.0578	ND(0.005) UJ	0.0353 J	0.00016 JB	0.243	0.0066 J	ND(0.00098)	0.157	0.347
GW-CS [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CD [a]	12/05/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CD [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CD [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ES	12/15/10	ND(0.003) UJ	ND(0.0095)	0.0186 J	ND(0.0013)	ND(0.01)	ND(0.017)	0.0421	ND(0.0135)	ND(0.005) UJ	ND(0.0345) UJ	ND(0.00005)	0.0606 J	0.502 J	ND(0.0008)	ND(0.0125)	ND(0.0405)
GW-ES Dup	12/15/10	ND(0.003) UJ	ND(0.0095)	0.0207 J	ND(0.0013)	ND(0.01)	ND(0.017)	0.0434	0.0153 J	ND(0.005) UJ	ND(0.0345) UJ	ND(0.00005)	0.0552 J	0.473 J	ND(0.0008)	ND(0.0125)	ND(0.0405)
GW-ES	03/15/11	ND(0.003)	ND(0.0095)	0.0582	ND(0.0013)	ND(0.01)	ND(0.017)	0.0582	ND(0.0135) UJ	ND(0.005)	ND(0.0345)	ND(0.00005) UJ	0.0507	0.439	ND(0.0008)	ND(0.0125)	ND(0.0405)
GW-ES	06/08/11	ND(0.003)	ND(0.0095)	0.0132 J	ND(0.0013)	ND(0.01)	ND(0.017)	0.0497	0.0285 JB	ND(0.005) R	ND(0.0345) UJ	0.000039 JB	0.0582	0.606 J	ND(0.0008) UJ	ND(0.0125)	ND(0.0405)
GW-ES	09/15/11	ND(0.0042)	ND(0.0095)	0.0529 J	ND(0.0013)	0.0025 J	0.0064 J	0.0469	0.0244 JB	ND(0.005)	ND(0.011) UJ	0.00018 JB	0.0855	0.751	ND(0.00098)	ND(0.0048)	0.0349 J
GW-ED [a]	12/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ED [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ED	06/08/11	ND(0.003)	0.0337 J	0.374 J	0.0025 J	ND(0.01)	0.0567 J	0.0501	0.0806	ND(0.005) R	ND(0.0345) UJ	ND(0.000026) UJ	0.196	0.0046 J	ND(0.0008) UJ	0.0901	0.201
GW-ED	09/15/11	0.0095 J	ND(0.0095)	0.0984 J	ND(0.0013)	0.0021 J	0.0135 J	0.0175 J	0.0279 JB	ND(0.005)	ND(0.011) UJ	0.00003 JB	0.0889	ND(0.0027)	ND(0.00098)	0.0219 J	0.104

TABLE 4.6-1. ANALYTICAL RESULTS, INORGANICS, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Arsenic, Total[1] (mg/L)	Barium, Total[2] (mg/L)	Beryllium, Total[1] (mg/L)	Cadmium, Total[2] (mg/L)	Chromium, Total[2] (mg/L)	Cobalt, Total[2] (mg/L)	Copper, Total[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Mercury, Total[3] (mg/L)	Nickel, Total[1] (mg/L)	Selenium, Total[1] (mg/L)	Silver, Total[1] (mg/L)	Vanadium, Total[2] (mg/L)	Zinc, Total[2] (mg/L)
GW-FS	10/21/10	ND(0.0006)	0.0078	0.14 J	0.00037 J	ND(0.002)	0.0148 J	0.0039 J	0.0202	ND(0.005) UJ	ND(0.0069) UJ	ND(0.000046)	0.0281	0.0661	0.00017 J	0.0187	0.0452
GW-FS	03/08/11	ND(0.003)	ND(0.0095)	0.0189 J	ND(0.0013)	ND(0.002)	ND(0.0034)	0.0071	0.0117	ND(0.005)	ND(0.0069)	ND(0.00005)	0.022 J	0.0715	ND(0.0008)	ND(0.0025)	ND(0.0081)
GW-FS	06/07/11	ND(0.0021)	ND(0.0048)	0.0207 J	ND(0.00065)	ND(0.01)	ND(0.017)	ND(0.0115)	0.0134 J	ND(0.005)	ND(0.0345)	ND(0.000026)	0.0166	0.0541	ND(0.00049)	ND(0.0125)	ND(0.0405)
GW-FS	09/13/11	ND(0.0021)	ND(0.0048)	0.0148 J	ND(0.00065)	ND(0.00027)	0.0024 JB	0.0029 J	0.0199	ND(0.005)	ND(0.0022) UJ	ND(0.000026)	0.0182 J	0.0858 J	ND(0.00049)	ND(0.00096)	0.0085 J
GW-GS	10/22/10	0.0017 J	0.0022 J	0.0566 J	ND(0.00026)	ND(0.002)	0.0055 J	0.0095	0.0122	ND(0.005)	ND(0.0069) UJ	ND(0.000046)	0.0958	0.223	ND(0.00016)	0.0048 J	0.0136 J
GW-GS	03/08/11	0.001	0.0014 J	0.0101 J	ND(0.00013)	ND(0.002)	ND(0.0034)	0.0126	0.0074 J	ND(0.005)	ND(0.0069)	ND(0.00005)	0.0778 J	0.249	ND(0.00008)	ND(0.0025)	ND(0.0081)
GW-GS	06/07/11	ND(0.0021)	ND(0.0048)	0.0098	ND(0.00065)	ND(0.002)	ND(0.0034)	0.0081	0.011	ND(0.005)	ND(0.0069)	ND(0.000026)	0.0795	0.202	ND(0.00049)	ND(0.0025)	ND(0.0081)
GW-GS	09/13/11	0.0017 JB	0.0018 J	0.0125 J	ND(0.00013)	ND(0.00027)	0.0022 JB	0.0058	0.0156	ND(0.005)	ND(0.0022) UJ	0.000032 JB	0.0645 J	0.136 J	ND(0.000098)	ND(0.00096)	0.018 J
GW-H [a]	11/16/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-H	03/09/11	ND(0.003) UJ	0.0287 J	0.111 J	ND(0.0013)	ND(0.01)	0.0223 J	0.103	0.0234 J	ND(0.005)	ND(0.0345)	ND(0.00005)	0.195 J	0.0973	ND(0.0008)	ND(0.0125)	0.0742 J
GW-H	06/27/11	ND(0.0105)	1.28	2.75	0.0631	0.0323	1.72	0.745	1.39	ND(0.01)	0.53	0.0058 JB	2.86	0.0954	0.0109 J	3.53	7.34
GW-H	09/12/11	ND(0.0021)	0.817 J	0.14 J	0.0351 J	0.0231	0.733	0.461	0.878	ND(0.005)	0.532 J	0.0046	1.84 J	0.104 J	0.0058	1.83	4.53
GW-K [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-K [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-K [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-K [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-L	06/07/11	ND(0.0042)	0.019 J	0.336	0.0015 J	ND(0.01)	0.0463 J	0.0311	0.0384 J	ND(0.005)	ND(0.0345)	ND(0.000026)	0.119	0.146	ND(0.00098)	0.0899	0.208
GW-L	09/13/11	ND(0.0021)	0.0084 J	0.118 J	ND(0.00065)	0.0018 JB	0.0233 JB	0.0248 J	0.0465 J	ND(0.005)	0.0123 J	0.000043 JB	0.0871 J	0.142 J	ND(0.00049)	0.0208 J	0.158
GW-L	12/06/11	ND(0.0021)	ND(0.0048)	0.024 J	ND(0.0013)	ND(0.0014)	ND(0.0055)	0.009 J	0.0086 J	ND(0.005)	ND(0.011) UJ	ND(0.000026) UJ	0.0802	0.125	ND(0.00049)	ND(0.0048)	0.0868 J
GW-L	03/19/12	ND(0.0021)	ND(0.0048)	0.0451	ND(0.00065)	ND(0.0014)	0.0134	0.0162	0.0161	ND(0.005)	ND(0.011)	0.000037	0.0699	0.166	ND(0.00049)	ND(0.0048)	0.148
GW-MS	10/21/10	ND(0.0006)	0.0051	0.108 J	0.00036 J	ND(0.002)	0.0133 J	0.0142	0.0167	ND(0.005) UJ	ND(0.0069) UJ	ND(0.000046)	0.0339	0.118	ND(0.00016)	0.0248	0.0513
GW-MS	03/14/11	ND(0.003)	ND(0.0095)	0.043	ND(0.0013)	ND(0.002)	0.0056 J	0.0124 J	0.0059 JB	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0271	0.128	ND(0.0008)	0.0053	0.021
GW-MS Dup	03/14/11	ND(0.003)	ND(0.0095)	0.04	ND(0.0013)	ND(0.002)	0.0049 J	0.0081 J	0.005 JB	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0241	0.129	ND(0.0008)	0.0046 J	0.0196 J
GW-MS	06/08/11	ND(0.003)	ND(0.0095)	0.0348 J	ND(0.0013)	ND(0.01)	ND(0.017)	ND(0.0115)	0.0231 JB	ND(0.005) R	ND(0.0345) UJ	ND(0.000026) UJ	0.0258	0.237 J	ND(0.0008) UJ	ND(0.0125)	ND(0.0405)
GW-MS	09/15/11	ND(0.0042)	ND(0.0095)	0.0221 J	ND(0.0013)	0.0024 J	ND(0.0055)	0.0079 J	0.0148 JB	ND(0.005)	ND(0.011) UJ	0.00004 JB	0.029	0.238	ND(0.00098)	ND(0.0048)	0.0368 J
GW-MDF [a]	03/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-MDF [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-MDF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-MDF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-NS	12/17/10	ND(0.003) UJ	0.0988	0.63	0.009	0.0084	0.129	0.077	0.21	ND(0.005)	0.108	ND(0.00005) UJ	0.246	0.351 J	0.0015 J	0.268	0.688
GW-NS [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-NS	06/07/11	ND(0.0021)	0.0362	0.715	0.0039	ND(0.01)	0.0631 J	0.0393	0.0802	ND(0.005)	0.0395 J	ND(0.000026)	0.104	0.0697	ND(0.00049)	0.11	0.253
GW-NS [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-NS	12/05/11	ND(0.0021)	0.0474	0.195 J	0.0068	0.0025 J	0.0258	0.0234 J	0.0507	ND(0.005)	0.0355 J	0.00036 JB	0.123	0.257	0.00074 J	0.0489	0.123
GW-NS	03/19/12	ND(0.0021)	0.0117	0.158	ND(0.0013)	0.00045	0.0154	0.0084	0.0402	ND(0.005)	0.0056	0.000047	0.0324	0.462	ND(0.00049)	0.0217	0.221
GW-NS	05/20/12	ND(0.0021)	ND(0.0048)	0.0543	ND(0.00065)	ND(0.00027)	0.0075 JB	0.0027 J	0.02 JB	ND(0.005)	ND(0.0022)	0.000037 JB	0.0074 J	0.357	ND(0.00049) UJ	ND(0.00096)	0.0467
GW-ND	12/15/10	0.0078 J	ND(0.0095)	0.0516 J	ND(0.0013)	ND(0.01)	ND(0.017)	0.0242 J	ND(0.0135)	ND(0.005) UJ	ND(0.0345) UJ	ND(0.00005)	0.0433 J	0.0383 J	ND(0.0008)	ND(0.0125)	ND(0.0405)
GW-ND	03/15/11	ND(0.003)	ND(0.0095)	0.0385	ND(0.0013)	ND(0.002)	ND(0.0034)	0.0033 J	0.0094 JB	ND(0.005)	ND(0.0069)	ND(0.00005) UJ	0.0243	0.0315	ND(0.0008)	ND(0.0025)	0.0236
GW-ND	06/07/11	ND(0.0021)	0.0278	0.343	0.0019 J	ND(0.01)	0.0347 J	0.0175 J	0.0375 J	ND(0.005)	ND(0.0345)	ND(0.000026)	0.0942	0.0231	ND(0.00049)	0.0516	0.105
GW-ND	09/14/11	ND(0.0042)	ND(0.0095)	0.0127 J	ND(0.0013)	0.0024 J	ND(0.0055)	0.0127 J	0.0206 JB	ND(0.005) R	ND(0.011) UJ	0.000044 JB	0.0424	0.0517	ND(0.00098)	ND(0.0048)	0.0332 J
GW-ND	12/06/11	ND(0.0021)	ND(0.0048)	0.0117 J	ND(0.0013)	ND(0.0014)	ND(0.0055)	ND(0.0031) UJ	0.006 J	ND(0.005)	ND(0.011) UJ	ND(0.000026) UJ	0.0345	0.0374	ND(0.00049)	ND(0.0048)	ND(0.016)
GW-ND	03/19/12	ND(0.0021)	ND(0.0048)	0.0108	ND(0.00065)	ND(0.0014)	0.0098	0.0095	ND(0.0047)	ND(0.005)	ND(0.011)	ND(0.000026)	0.0343	0.0356	ND(0.00049)	ND(0.0048)	0.0202
GW-ND	05/18/12	ND(0.0021)	ND(0.0048)	0.01 J	ND(0.00065)	ND(0.0014)	ND(0.0055)	0.006 J	0.0128 J	ND(0.005)	0.0252 J	0.000038 JB	0.0329	0.0197	ND(0.00049) UJ	ND(0.0048)	0.0238 J
PA-5R	12/10/11	ND(0.0042)	ND(0.0095)	0.0257	ND(0.00065)	ND(0.0014)	0.0104 J	0.0135 J	0.0169 J	ND(0.005) R	ND(0.011) UJ	ND(0.000026) UJ	0.0149 J	0.005 JB	ND(0.00098)	ND(0.0048)	0.0338 J
PA-5R	03/22/12	ND(0.0042)	ND(0.0095)	0.0143	ND(0.0013)	ND(0.0014)	0.0082	ND(0.0031)	0.0067	ND(0.005)	0.0243	ND(0.000026)	0.0069	0.0039	ND(0.00098)	ND(0.0048)	0.0325
PA-5R	05/21/12	ND(0.0042) UJ	ND(0.0095)	0.0151	ND(0.0013)	ND(0.00027)	0.0072 J	0.0018 J	0.0164 JB	ND(0.005)	ND(0.0022)	ND(0.000026) UJ	ND(0.005)	0.0031 J	ND(0.00098)	ND(0.0048)	0.0156 J
Groundwater Standard or RBSL (mg/L):		0.006	0.01	1	0.004	0.005	0.1	0.0047	1.3	0.2	0.015	0.002	0.1	0.05	0.1	0.063	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
[a] - Sample not collected due to insufficient water volume
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
P2RI-1S	01/27/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-1S	06/22/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-1S	09/21/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-1S	10/27/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-1D	06/24/10	0.0002 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J
P2RI-1D	03/11/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-1D	06/08/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-1D	09/13/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-2	06/24/10	0.001 J	ND(0.001) UJ	ND(0.01)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	0.031	ND(0.001)	ND(0.001)	0.019 J	ND(0.001)	ND(0.001)	ND(0.001)	0.0036 J
P2RI-2	09/23/10	0.0027 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	0.004 J	ND(0.001)	ND(0.001)	0.0085	ND(0.001)	ND(0.001)	ND(0.001)	0.0028 J
P2RI-2	10/28/10	0.0031 J	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	0.0096 J	ND(0.002)	ND(0.002)	0.016	ND(0.002)	ND(0.002)	ND(0.002)	0.0037 J
P2RI-2	03/15/11	0.003 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	0.005 J	ND(0.001)	ND(0.001)	0.011	ND(0.001)	ND(0.001)	ND(0.001)	0.0031 J
P2RI-3S	10/25/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0023	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3S	03/15/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3S	06/08/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3S	09/13/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	0.0007	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)
P2RI-3D	02/18/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-3D	09/20/10	0.0029	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0023 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-3D	10/25/10	0.002	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J
P2RI-3D	03/15/11	0.0014 J	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0029	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-4S	10/26/10	1.4	ND(0.002) UJ	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	0.011	ND(0.002)	0.002 JB	0.98	ND(0.002)	ND(0.002)	ND(0.002)	0.15
P2RI-4S	03/15/11	1.3	ND(0.002)	0.03 J	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.49	ND(0.002)	ND(0.002)	ND(0.002)	0.16
P2RI-4S	12/09/11	1.5	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.95	ND(0.002)	ND(0.002)	ND(0.002)	0.16
P2RI-4S	03/21/12	1.2	ND(0.002)	0.03	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.53	ND(0.002)	ND(0.002)	ND(0.002)	0.13
P2RI-4S	05/20/12	0.89	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.35	ND(0.002)	ND(0.002)	ND(0.002)	0.04
P2RI-4D	01/27/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-4D	06/22/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-4D	09/21/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-4D	10/26/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-5	01/29/10	0.23	ND(0.0002) UJ	ND(0.002)	0.0003 J	0.0003 J	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.011	ND(0.0002)	ND(0.0002)	0.013	0.0051
P2RI-5	06/22/10	0.4 J	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.011	ND(0.0002)	ND(0.0002)	0.019	0.0024
P2RI-5	09/23/10	0.025	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0053	ND(0.0005)	ND(0.0005)	0.0054	0.0006 J
P2RI-5	10/28/10	0.097	0.075	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0027 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-5	03/15/11	0.19	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0039	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0008 J
P2RI-5	06/13/11	0.23	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.005	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0008 JB
P2RI-5S	06/28/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.015	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-5S	09/19/11	0.021	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.045	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0062
P2RI-5S	12/09/11	0.019	ND(0.0005)	ND(0.005)	0.0011 J	0.0011 J	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.094	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.042
P2RI-5S	03/21/12	0.022	ND(0.0005)	0.016	0.001	0.0015	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.069	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.025
P2RI-6	01/29/10	2.7	ND(0.005) UJ	0.054 J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.25	ND(0.005)	ND(0.005)	0.11	0.32
P2RI-6	06/23/10	3.1	ND(0.005) R	ND(0.05)	ND(0.005) UJ	ND(0.005) UJ	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.28 J	ND(0.005)	ND(0.005)	ND(0.005)	0.41
P2RI-6	09/23/10	2.6	ND(0.005)	0.066 J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.28	ND(0.005)	ND(0.005)	ND(0.005)	0.33
P2RI-6	10/28/10	2.7	0.49	0.058 J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.29	ND(0.005)	ND(0.005)	ND(0.005)	0.23
P2RI-7	03/10/11	0.0036	ND(0.0005)	0.0061 JB	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0039	ND(0.0005)	ND(0.0005)	0.0082	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0006 J
P2RI-7	06/09/11	0.018	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.011	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0029
P2RI-7	09/19/11	0.014	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0069	ND(0.0005)	ND(0.0005)	0.012	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0009 J
P2RI-7	12/09/11	0.015	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.017	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0012 J
P2RI-7	03/21/12	0.013	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.011	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0016
P2RI-8	09/20/11	0.0023 J	ND(0.002) UJ	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	0.016	ND(0.002)	ND(0.002)	0.049	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
P2RI-8	12/07/11	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	0.0087 J	ND(0.002)	ND(0.002)	0.036	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
P2RI-8	03/19/12	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.0096	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
P2RI-8	05/20/12	0.0035 J	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.02	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
P2RI-9S	01/29/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9S	06/23/10	ND(0.0001)	ND(0.0001) R	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9S	09/21/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9S	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9D	01/29/10	0.0001 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J
P2RI-9D	06/23/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9D	09/21/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9D	10/27/10	0.0001	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10S	01/29/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10S	06/24/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10S	09/20/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-10S	10/25/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	09/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11S	01/29/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0012	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J
P2RI-11S	06/23/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S	09/21/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S Dup	09/21/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S Dup	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
P2RI-11D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-12	09/22/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-12	10/25/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-12	03/30/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-13 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	01/28/10	0.016	ND(0.0001) UJ	0.0025 J	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0056	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)
P2RI-14	06/24/10	0.0005	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0044 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-14	09/22/10	0.0004 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-14	10/27/10	0.0008 J	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-15 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15	09/13/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-15 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-16S	06/24/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)
P2RI-16S	09/22/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-16S	10/26/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	03/10/11	0.0027 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D Dup	03/10/11	0.0027 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	06/11/11	0.0027 J	ND(0.001) UJ	0.17	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D Dup	06/11/11	0.0028 J	ND(0.001) UJ	0.2	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	09/17/11	0.0036	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-16D Dup	09/17/11	0.0037 J	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	12/08/11	0.0042 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D Dup	12/08/11	0.0041 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-17	01/28/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-17	06/24/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)
P2RI-17	10/25/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18	01/28/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-18	06/23/10	ND(0.0001)	ND(0.0001) R	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-18 Dup	06/23/10	ND(0.001)	ND(0.001) R	ND(0.01)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18SR	11/05/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18SR	03/30/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18SR	06/10/11	ND(0.0005)	ND(0.0005) UJ	100	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18SR	09/17/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18D	11/04/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D Dup	11/04/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D	06/10/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D	09/17/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D	12/08/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19S	01/28/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-19S	06/24/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)
P2RI-19S	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-19S	10/27/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	11/16/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	03/11/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	06/09/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	09/15/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D Dup	09/15/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-20	01/28/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-20 Dup	01/28/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-20	06/24/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-20	09/20/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-20 Dup	09/20/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-20	10/25/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-20 Dup	10/25/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	11/05/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	06/09/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	09/15/11	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21D	10/27/10	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-21D	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21D	06/10/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21D	09/14/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
P2RI-22S	01/27/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22S	06/24/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-22S Dup	06/24/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)
P2RI-22S	09/22/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-22S	10/26/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-22D	01/27/10	0.0007	ND(0.0001)	0.008	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	0.0003 J	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J
P2RI-22D	06/24/10	ND(0.0001)	ND(0.0001) UJ	0.0016 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.001	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001) UJ	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)
P2RI-22D	09/22/10	ND(0.0001)	ND(0.0001) UJ	0.0013 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.012	ND(0.0001)	0.0004 JB	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22D	10/26/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22D	06/09/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	0.008 JB	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-22D	09/15/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	0.0041 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-23S	01/27/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-23S	06/23/10	ND(0.0001)	ND(0.0001) R	ND(0.001)	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-23S	09/22/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-23S	10/27/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	11/11/10	ND(0.0005)	ND(0.0005)	ND(0.005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	03/15/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	06/09/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	09/16/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0032	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-24S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-24D	03/10/11	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-24D	06/10/11	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-24D	09/16/11	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	01/27/10	0.18	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	06/24/10	0.12	ND(0.0002) UJ	ND(0.002) UJ	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ	ND(0.0002)	ND(0.0002) UJ	ND(0.0002)
P2RI-25S	09/22/10	0.0026	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	10/28/10	0.16	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-25D	11/11/10	0.26	ND(0.0002)	ND(0.002) UJ	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0003 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25D Dup	11/11/10	0.26	ND(0.0002)	ND(0.002) UJ	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0003 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25D	03/16/11	0.18 J	ND(0.0002)	ND(0.002)	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0002 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ
P2RI-25D Dup	03/16/11	0.2 J	ND(0.0002)	ND(0.002)	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0002 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ
P2RI-25D	09/19/11	0.22	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-26S	10/22/10	0.0095	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-26S Dup	10/22/10	0.01	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-26S	03/16/11	ND(0.001) UJ	ND(0.001)	ND(0.01)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ
P2RI-26S	06/14/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-26S	09/20/11	0.0071	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-26D	11/12/10	1.4	ND(0.05)	ND(0.005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.018	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.013
P2RI-26D	03/16/11	1.2 J	ND(0.002)	ND(0.02)	ND(0.002) UJ	ND(0.002) UJ	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.017 J	ND(0.002)	ND(0.002)	ND(0.002)	0.016 J
P2RI-26D Dup	03/16/11	1.2 J	ND(0.002)	ND(0.02)	ND(0.002) UJ	ND(0.002) UJ	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.019 J	ND(0.002)	ND(0.002)	ND(0.002)	0.016 J
P2RI-26D	06/14/11	1.3	ND(0.002)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.015	ND(0.002)	ND(0.002)	ND(0.002)	0.014
P2RI-26D	09/20/11	1.5	ND(0.005)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.017 J	ND(0.005)	ND(0.005)	ND(0.005)	0.019 J
P2RI-27S	03/10/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27S	06/14/11	ND(0.0005)	ND(0.0005) UJ	0.76	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27S	09/14/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27S	12/07/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27D	06/28/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-27D	09/14/11	0.0001 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-27D	12/07/11	0.0001 J	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-27D	03/20/12	0.0004	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002
P2RI-27DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-28S	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-28S	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-28S	05/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-29S	12/09/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-29S	03/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-29S	05/18/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-30S	12/09/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)
P2RI-30S	03/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-30S	05/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-31S	12/10/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0022 J	ND(0.0005)
P2RI-31S	03/22/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0013	ND(0.0005)
P2RI-31S	05/21/12	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0013 J	ND(0.001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
P2RI-32S	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-32S	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-32S	05/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-33S	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33S	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D	11/04/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D	03/17/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D Dup	03/17/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J
P2RI-33D	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D Dup	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D Dup	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-34S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	0.0002 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0006	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J
P2RI-34D	03/11/11	0.0002 J	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J
P2RI-34D	06/11/11	0.0001 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-34D	09/17/11	0.0002 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	11/03/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S Dup	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	09/15/11	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36S	03/14/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36S	06/09/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36S	09/15/11	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36DF [a]	03/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37S	03/17/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-37S	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37S	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	06/27/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D Dup	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D Dup	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-38S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-40S	03/10/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-40S	06/08/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-40S	09/15/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-41S	11/15/10	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0006	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-41S	03/11/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-41S [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41D	11/05/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013	ND(0.0001)	ND(0.0001)	0.0005	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-41D	03/11/11	0.0004 J	0.0003 J	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0004 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J
P2RI-41D	06/11/11	0.0004 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-41D	09/17/11	0.0004 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
P2RI-43S	11/03/10	0.3	ND(0.0005) UJ	0.031 JB	0.0012 J	0.0031	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.14	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.014
P2RI-43S	03/16/11	0.7 J	ND(0.0005)	0.085 J	0.0034 J	0.004 J	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.18 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.37 J
P2RI-43S	06/11/11	0.6	ND(0.002) UJ	0.044 J	0.0023 J	0.0022 J	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.16	ND(0.002)	ND(0.002)	ND(0.002)	0.21
P2RI-43S	09/19/11	0.65	ND(0.002) UJ	0.03 JB	ND(0.002)	0.0028 J	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.2	ND(0.002)	ND(0.002)	0.0036 J	0.28
P2RI-43D	03/30/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-43D	06/11/11	0.0002 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-43D	09/19/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-43D	12/09/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44S [a]	11/05/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44SR	06/10/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR Dup	06/10/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR Dup	09/16/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-44SR	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR	03/20/12	0.0015	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR Dup	03/20/12	0.0015	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44D	03/10/11	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-44D	06/10/11	0.0002 J	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-44D	09/16/11	0.0012	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-44D	12/06/11	0.0013	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-45S	11/03/10	0.078	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.057	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.026
P2RI-45S	03/16/11	0.16 J	ND(0.0005)	ND(0.005)	0.0015 J	0.0012 J	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.063 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.051 J
P2RI-45S Dup	03/16/11	1.4 J	ND(0.002)	ND(0.02)	0.014 J	0.0094 J	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.39 J	ND(0.002)	ND(0.002)	ND(0.002)	0.25 J
P2RI-45S	06/11/11	0.3	ND(0.0005) UJ	ND(0.005)	0.0035	0.0027	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.19	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.084
P2RI-45S	09/19/11	0.15	ND(0.0005) UJ	ND(0.005)	0.0022 J	0.002 J	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.073	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.019
P2RI-45D	06/28/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)
P2RI-45D	09/19/11	0.0008 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)
P2RI-45D	12/09/11	0.0003 J	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-45D	03/22/12	0.0009	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-46S	11/03/10	0.22	ND(0.001) UJ	ND(0.01)	0.0031 J	0.0031 J	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.13	ND(0.001)	ND(0.001)	ND(0.001)	0.05
P2RI-46S	03/15/11	0.056	ND(0.001)	ND(0.01)	0.0028 J	0.0021 J	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.058	ND(0.001)	ND(0.001)	ND(0.001)	0.028
P2RI-46S	06/11/11	0.012	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.032	ND(0.001)	ND(0.001)	ND(0.001)	0.0029 J
P2RI-46S	09/19/11	0.0098	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.023	ND(0.001)	ND(0.001)	ND(0.001)	0.0025 J
P2RI-46D	12/16/10	0.0077	ND(0.0002) UJ	0.01	0.0004 J	0.0009 J	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.098	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.015
P2RI-46D	03/15/11	0.0087	ND(0.001)	ND(0.01)	0.0027 J	0.0065	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.3	ND(0.001)	ND(0.001)	ND(0.001)	0.024
P2RI-46D	06/11/11	0.012	ND(0.0005) UJ	ND(0.005)	0.0008 J	0.0013 J	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.11	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0086
P2RI-46D	09/19/11	0.015	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	0.0007 J	ND(0.0005)	0.012	ND(0.0005)	ND(0.0005)	0.11	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0087
P2RI-46DFL	12/16/10	0.0015	ND(0.0001) UJ	0.0055	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0009	ND(0.0001)	ND(0.0001)	0.001	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J
P2RI-46DFL	03/15/11	0.0016	ND(0.0001)	0.0028 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0046	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J
P2RI-46DFL	06/13/11	0.0014	ND(0.0001)	0.0013 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0065	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB
P2RI-46DFL	09/19/11	0.0017	ND(0.0001) UJ	0.0021 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0083	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J
P2RI-47DF [a]	03/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	06/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFU	06/28/11	0.019	ND(0.0001) UJ	0.048	0.0001 J	0.0001 J	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.02	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.006
P2RI-46DFU	09/19/11	0.0086	ND(0.0001) UJ	0.02 JB	0.0001 J	0.0001 J	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.022	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0039
P2RI-46DFU	12/09/11	0.0023	ND(0.0001)	0.0041 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0064	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0006
P2RI-46DFU	03/21/12	0.0031	ND(0.0001)	0.0041	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0048	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013
P2RI-47S	11/05/10	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-47S	03/17/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-47S	06/14/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-47S	09/20/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-47DF	03/17/11	0.0039	ND(0.0001)	0.024	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0012	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0008
P2RI-47DF	06/14/11	0.0014	ND(0.0001)	0.011	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.021	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J
P2RI-48S	11/03/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-48S	03/15/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-48S	06/14/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-48S	09/17/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-49S	11/05/10	ND(0.002)	ND(0.002) UJ	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
P2RI-49S	12/09/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-49S	03/11/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-49S	06/14/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-50S	12/09/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	03/15/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	06/11/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	09/16/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	05/21/12	0.0019 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0011 J

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
P2RI-51S	12/16/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0007 J
P2RI-51S	03/10/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	06/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	09/12/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	12/03/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	03/17/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	05/17/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-52S	06/28/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52S	09/14/11	ND(0.0001) UJ	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52S	12/08/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52DF	06/28/11	0.0009	ND(0.0001) UJ	0.073	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J
P2RI-52DF	09/14/11	0.0022 J	ND(0.0001) UJ	0.012	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0032	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J
P2RI-52DF	12/08/11	0.0026	ND(0.0001) UJ	0.0072 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)	ND(0.0001)	0.0005 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J
P2RI-52DF	03/21/12	0.0021	ND(0.0001)	0.0047	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003
P2RI-53S	06/15/11	0.15	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0015 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S	09/16/11	0.17	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0022 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S Dup	09/16/11	0.16	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0025 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S	12/08/11	0.15	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0013 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S Dup	12/08/11	0.18	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0026	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0009 J
P2RI-53S	03/22/12	0.14	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0021	ND(0.001)	ND(0.001)	0.0013	ND(0.001)
P2RI-54SU	06/15/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SU	09/16/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SU	12/08/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SU	03/20/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SM	06/15/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0007	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM Dup	05/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-54SL	06/27/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0009	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SL	09/16/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SL	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SL	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-55S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-55S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-55S	05/20/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-55DF [a]	11/30/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	05/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-56S [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	05/16/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	0.021	ND(0.0005)	0.026 JB	0.0017 J	0.0036	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.3	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.022
P2RI-56DF	03/22/12	0.0048	ND(0.0005)	0.02	ND(0.0005)	0.001	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.11	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0035
P2RI-56DF	05/21/12	0.0037	ND(0.0005)	0.01 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.062	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0032
P2RI-57S	12/07/11	0.0005 J	ND(0.0001)	ND(0.001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0033	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013
P2RI-57S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-57S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-58S	12/08/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-58S	03/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-58S	05/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	12/08/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	03/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	05/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S Dup	05/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-60S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-60S Dup	12/07/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-60S	03/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-60S Dup	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-60S	05/21/12	0.018	0.0024 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-60S Dup	05/21/12	0.019	0.0024 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-61S	12/08/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-61S	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-61S Dup	03/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-61S	05/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-62S	12/08/11	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0036	ND(0.0002)
P2RI-62S	03/22/12	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0039	ND(0.0002)
P2RI-62S	05/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0026 J	ND(0.001)
P2RI-63S	12/08/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	03/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	05/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
GW-A	03/09/11	0.012	ND(0.0001)	0.01	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0006	ND(0.0001)	ND(0.0001)	0.013	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.003
GW-A	06/27/11	0.0021	ND(0.0001) UJ	0.0021 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.0026	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J
GW-A	09/13/11	0.0017	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	0.001	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J
GW-A	12/06/11	0.0036	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	0.0004 J	0.0026	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0007
GW-C-24	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-24	06/07/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-24	09/14/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-24	12/06/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-25	06/07/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-25	09/12/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)
GW-C-25	12/05/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-25	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-29	10/21/10	0.018	ND(0.0002) UJ	0.0025 J	0.0005 J	0.0005 J	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.036	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.01
GW-C-29	03/14/11	0.034	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.013	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-29	06/08/11	0.0077	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-29	09/15/11	0.023 J	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0019 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-29 Dup	09/15/11	0.0088 J	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0019 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	11/03/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	06/08/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	09/14/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-46S	03/09/11	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S Dup	03/09/11	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S	06/08/11	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S	09/14/11	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0011	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S	12/06/11	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0028	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46DF	03/09/11	0.0011	ND(0.0002)	0.0029 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0007 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 J
GW-C-46DF	09/13/11	0.0012	ND(0.0002) UJ	0.0021 J	ND(0.0002) UJ	ND(0.0002)	ND(0.0002)	0.0047	ND(0.0002)	ND(0.0002)	0.0004 J	ND(0.0002)	ND(0.0002) UJ	ND(0.0002)	ND(0.0002)
GW-C-46DF	12/06/11	0.001 J	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0033	ND(0.0002)	ND(0.0002)	0.0008 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 J
GW-C-46DF	03/19/12	0.0012	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0016	ND(0.0002)	ND(0.0002)	0.0011	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0008
GW-C-47S	11/03/10	0.17	ND(0.002) UJ	ND(0.02)	0.0098 J	0.0078 J	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.4	ND(0.002)	ND(0.002)	ND(0.002)	0.18
GW-C-47S	03/14/11	0.2	ND(0.002)	0.071 J	0.023	0.016	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.33	ND(0.002)	ND(0.002)	ND(0.002)	0.07
GW-C-47S	06/08/11	0.29	ND(0.002) UJ	0.026 J	0.009 J	0.0057 J	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.26	ND(0.002)	ND(0.002)	ND(0.002)	0.016
GW-C-47S	12/06/11	0.31	ND(0.005) UJ	ND(0.05)	0.005 J	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.16	ND(0.005)	ND(0.005)	ND(0.005)	0.017 J
GW-C-47DF	03/12/11	0.064	ND(0.0005)	0.012 J	0.0033	0.0027	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.047	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.03
GW-C-47DF	03/21/12	0.043	ND(0.002)	0.03 JB	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.015	ND(0.002)	ND(0.002)	ND(0.002)	0.0078 J
GW-C-47DF	05/20/12	0.038	ND(0.001)	0.027	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.013	ND(0.001)	ND(0.001)	ND(0.001)	0.0088
GW-C-47DF	05/20/12	0.034	ND(0.002)	0.025 J	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	0.014	ND(0.002)	ND(0.002)	ND(0.002)	0.0094 J
GW-C-48	03/11/11	0.012 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0048 J	ND(0.001)	ND(0.001)	ND(0.001)	0.0021 J
GW-C-48 Dup	03/11/11	0.033 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0093 J	ND(0.001)	ND(0.001)	ND(0.001)	0.0056 J
GW-C-48	06/11/11	0.073	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.012	ND(0.001)	ND(0.001)	ND(0.001)	0.012
GW-C-48 Dup	06/11/11	0.073	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.012	ND(0.001)	ND(0.001)	ND(0.001)	0.012
GW-C-48	09/15/11	0.061 J	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0076	ND(0.001)	ND(0.001)	ND(0.001)	0.0057
GW-C-48	12/06/11	0.019	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0019 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-C-48 Dup	12/06/11	0.021	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0025 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-CS	03/11/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0022 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	06/08/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	09/14/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	12/06/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CD	12/05/11	0.0021 J	ND(0.0002) R	ND(0.002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	0.0037 J	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	0.0003 J
GW-CD	03/19/12	0.0018	ND(0.0002)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.01	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-CD	05/20/12	0.0015 J	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0031	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CDF [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ES	12/15/10	0.57	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.024	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J
GW-ES Dup	12/15/10	0.59	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.025	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ES	03/15/11	0.98	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.038	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ES	06/08/11	1.3	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.057	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ES	09/15/11	1.2 J	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.06	ND(0.001)	ND(0.001)	0.0074	ND(0.001)
GW-ED	12/17/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-ED	03/15/11	0.0005 J	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-ED	06/08/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-ED	09/15/11	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-FS	10/21/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-FS	03/08/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-FS	06/07/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-FS	09/13/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
GW-GS	10/22/10	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-GS	03/08/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-GS	06/07/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-GS	09/13/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	11/16/10	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	06/27/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	09/12/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)
GW-K	06/07/11	0.05	ND(0.001) UJ	0.035 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.11	ND(0.001)	ND(0.001)	ND(0.001)	0.0066
GW-K	09/12/11	0.062	ND(0.001) UJ	ND(0.01)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.17 J	ND(0.001)	ND(0.001) UJ	ND(0.001)	0.0094
GW-K	12/06/11	0.063	ND(0.001)	0.045 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.13	ND(0.001)	ND(0.001)	ND(0.001)	0.0092
GW-K	03/19/12	0.059	ND(0.001)	0.032	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.09	ND(0.001)	ND(0.001)	ND(0.001)	0.0067
GW-L	06/07/11	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-L	09/13/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-L	12/06/11	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-L	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-MS	10/21/10	ND(0.0002)	ND(0.0002) UJ	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.0002)	0.0006 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-MS	03/14/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MS Dup	03/14/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MS	06/08/11	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0009 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MS	09/15/11	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MDF	03/12/11	0.14	ND(0.001)	0.037 J	0.0037 J	0.0035 J	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.23	ND(0.001)	ND(0.001)	ND(0.001)	0.057
GW-MDF	06/08/11	0.073	ND(0.001) UJ	0.02 J	0.002 J	0.0018 J	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.15	ND(0.001)	ND(0.001)	ND(0.001)	0.029
GW-MDF	09/13/11	0.035	ND(0.001) UJ	0.019 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.066	ND(0.001)	ND(0.001)	ND(0.001)	0.011
GW-MDF	12/06/11	0.046	ND(0.001)	0.033 JB	ND(0.001)	0.001 J	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.076	ND(0.001)	ND(0.001)	ND(0.001)	0.016
GW-NS	12/17/10	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0011 J
GW-NS	03/15/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	06/07/11	ND(0.001)	ND(0.001)	1.1	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	09/14/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	12/05/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	03/19/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	05/20/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	12/15/10	0.022	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J
GW-ND	03/15/11	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	06/07/11	0.012	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	09/14/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	12/06/11	0.0073	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	03/19/12	0.0055	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	05/18/12	0.0021 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
PA-5R	12/10/11	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
PA-5R	03/22/12	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
PA-5R	05/21/12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Groundwater Standard or RBSL		0.005	0.000016	4.9	0.78	1.6	0.51	0.72	0.1	0.07	13	0.000004	0.0024	0.004	0.7

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
P2RI-1S	01/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-1S	06/22/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-1S	09/21/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-1S	10/27/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-1D	06/24/10	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0005	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0005 J	0.0003 J	0.0008
P2RI-1D	03/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-1D	06/08/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-1D	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-2	06/24/10	0.002 J	0.0019 J	ND(0.001)	0.0018 J	ND(0.001)	ND(0.001)	0.0019 J	ND(0.001)	ND(0.001)	0.0074	0.0035 J	0.0067	0.0042 J	0.011
P2RI-2	09/23/10	ND(0.001)	0.0012 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0032 J	0.0016 J	0.0033 J	0.0012 J	0.0045 J
P2RI-2	10/28/10	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.0036 J	0.0024 J	0.005 J	ND(0.002)	0.005 J
P2RI-2	03/15/11	ND(0.001)	0.0018 J	ND(0.001)	0.0017 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0031 J	0.0015 J	0.0039 J	0.0015 J	0.0054
P2RI-3S	10/25/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3S	03/15/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3S	06/08/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3S	09/13/11	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-3D	02/18/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0013 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-3D	09/20/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0008 JB	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-3D	10/25/10	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0007	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0005 J	0.0002 J	0.0007
P2RI-3D	03/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0005 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-4S	10/26/10	0.2	0.012	ND(0.002)	0.0062 J	ND(0.002)	ND(0.002)	1.9	ND(0.002)	ND(0.002)	0.076	0.035	1.2	0.47	1.7
P2RI-4S	03/15/11	0.09	0.014	ND(0.002)	0.0083 J	ND(0.002)	ND(0.002)	1.6	ND(0.002)	ND(0.002)	0.063	0.026	1.3	0.56	1.9
P2RI-4S	12/09/11	0.18	0.015	ND(0.002)	0.0074 J	ND(0.002)	ND(0.002)	0.88	ND(0.002)	ND(0.002)	0.11	0.051	1.6	0.64	2.2
P2RI-4S	03/21/12	0.16	0.013	ND(0.002)	0.0074	ND(0.002)	ND(0.002)	1.2	ND(0.002)	ND(0.002)	0.11	0.05	1.5	0.61	2.1
P2RI-4S	05/20/12	0.065 J	0.0042 J	ND(0.002)	0.0021 J	ND(0.002)	ND(0.002)	0.54	ND(0.002)	ND(0.002)	0.023	0.012	0.44	0.21	0.65
P2RI-4D	01/27/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-4D	06/22/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-4D	09/21/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-4D	10/26/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-5	01/29/10	0.0062	0.0011	ND(0.0002)	0.0012	ND(0.0002)	ND(0.0002)	0.071	ND(0.0002)	ND(0.0002)	0.0058	0.002	0.013	0.0077	0.021
P2RI-5	06/22/10	0.0016	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.16	ND(0.0002)	ND(0.0002)	0.0009 J	0.0003 J	0.0052	0.0045	0.0097
P2RI-5	09/23/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.046	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0019 J	0.0026	0.0045
P2RI-5	10/28/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.043	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-5	03/15/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.062	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0016	0.0016	0.0032
P2RI-5	06/13/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.07	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0016 JB	0.0015	0.0031 JB
P2RI-5S	06/28/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0049	0.0009 J	0.0027	0.0036
P2RI-5S	09/19/11	0.0016 J	0.0006 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.014	ND(0.0005)	ND(0.0005)	0.0033	0.0022 J	0.0095	0.0081	0.018
P2RI-5S	12/09/11	0.023	0.0054	ND(0.0005)	0.0055	ND(0.0005)	ND(0.0005)	0.062	ND(0.0005)	ND(0.0005)	0.034	0.012	0.084	0.062	0.15
P2RI-5S	03/21/12	0.009	0.0056	ND(0.0005)	0.004	ND(0.0005)	ND(0.0005)	0.04	ND(0.0005)	ND(0.0005)	0.037	0.022	0.057	0.044	0.1
P2RI-6	01/29/10	0.12	0.034	ND(0.005)	0.036	ND(0.005)	ND(0.005)	3.7	ND(0.005)	ND(0.005)	0.26	0.075	1.4	0.88	2.3
P2RI-6	06/23/10	0.13	0.036	ND(0.005)	0.038	ND(0.005)	ND(0.005)	4.8	ND(0.005)	ND(0.005)	0.26	0.078	1.5	0.89	2.4
P2RI-6	09/23/10	0.13	0.03	ND(0.005)	0.025	ND(0.005)	ND(0.005)	3.8	ND(0.005)	ND(0.005)	0.25	0.072	1.5	0.89	2.4
P2RI-6	10/28/10	0.12	0.025 J	ND(0.005)	0.016 J	ND(0.005)	ND(0.005)	4.2	ND(0.005)	ND(0.005)	0.26	0.08	1.7	0.98	2.6
P2RI-7	03/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0056 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0016 J	0.002 J	0.0036
P2RI-7	06/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.035	ND(0.0005)	ND(0.0005)	0.001 J	0.0006 J	0.0096	0.0068	0.016
P2RI-7	09/19/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.017	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0042	0.0039	0.0081
P2RI-7	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.022	ND(0.0005)	ND(0.0005)	0.0006 J	ND(0.0005)	0.0066	0.0057	0.012
P2RI-7	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.022	ND(0.0005)	ND(0.0005)	0.0009	ND(0.0005)	0.0068	0.0053	0.012
P2RI-8	09/20/11	0.0038 J	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.0035 J	ND(0.002)	ND(0.002)	ND(0.002)	0.0053 J	0.0041 J	0.027	0.031
P2RI-8	12/07/11	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.0022 J	ND(0.002)	ND(0.002)	ND(0.002)	0.0048 J	0.0034 J	0.017	0.02
P2RI-8	03/19/12	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.0024	0.0022	0.0072	0.0093
P2RI-8	05/20/12	ND(0.002) UJ	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.0042 J	ND(0.002)	ND(0.002)	ND(0.002)	0.0033 J	0.003 J	0.015	0.018
P2RI-9S	01/29/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9S	06/23/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9S	09/21/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9S	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9D	01/29/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0005 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J	0.0002 J	0.0004 J
P2RI-9D	06/23/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0001 J	0.0004 J
P2RI-9D	09/21/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-9D	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10S	01/29/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10S	06/24/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10S	09/20/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-10S	10/25/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-10D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	09/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11S	01/29/10	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	0.0002 J	0.0006	0.0006	0.0012	0.0017
P2RI-11S	06/23/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S	09/21/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S Dup	09/21/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-11S Dup	10/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
P2RI-11D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-12	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-12	10/25/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-12	03/30/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-13 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	01/28/10	0.0003 J	0.001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0004 J	0.0002 J	0.0007	0.0009
P2RI-14	06/24/10	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0002 J	0.0003 J	0.0004 J
P2RI-14	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-14	10/27/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-15 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-15 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-16S	06/24/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-16S	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-16S	10/26/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	03/10/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D Dup	03/10/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	06/11/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D Dup	06/11/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	09/17/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-16D Dup	09/17/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-16D Dup	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-17	01/28/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-17	06/24/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-17	09/20/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-17	10/25/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18	01/28/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-18	06/23/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-18 Dup	06/23/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18SR	11/05/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18SR	03/30/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0007 J	ND(0.0005)	0.0009 J	ND(0.0005)	0.0009 J
P2RI-18SR	06/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18SR	09/17/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-18D	11/04/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D Dup	11/04/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D	06/10/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D	09/17/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-18D	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19S	01/28/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-19S	06/24/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-19S	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-19S	10/27/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	11/16/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	03/11/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	06/09/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D	09/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-19D Dup	09/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-20	01/28/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-20 Dup	01/28/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-20	06/24/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-20	09/20/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-20 Dup	09/20/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-20	10/25/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-20 Dup	10/25/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	11/05/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	06/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21S	09/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21D	10/27/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-21D	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21D	06/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-21D	09/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
P2RI-22S	01/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22S	06/24/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-22S Dup	06/24/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22S	09/22/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-22S	10/26/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.001 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.001 J	ND(0.0005)	0.001 J
P2RI-22D	01/27/10	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0017	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	0.0008	0.0006	0.0014
P2RI-22D	06/24/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22D	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	0.0002 J	0.0003 JB
P2RI-22D	10/26/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-22D	06/09/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-22D	09/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-23S	01/27/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-23S	06/23/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-23S	09/22/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-23S	10/27/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	11/11/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	03/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	06/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-23D	09/16/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-24S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0005 J	ND(0.0002)	0.0005 J
P2RI-24D	03/10/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-24D	06/10/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0002 JB	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-24D	09/16/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	01/27/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0019	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	06/24/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0015	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	09/22/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 JB	ND(0.0002)	0.0003 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25S	10/28/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0014 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-25D	11/11/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0039	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25D Dup	11/11/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0039	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-25D	03/16/11	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002)	ND(0.0002) UJ	ND(0.0002)	ND(0.0002)	0.0034 J	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002) UJ
P2RI-25D Dup	03/16/11	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002)	ND(0.0002) UJ	ND(0.0002)	ND(0.0002)	0.0031 J	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002) UJ	ND(0.0002) UJ
P2RI-25D	09/19/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0029 JB	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-26S	10/22/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-26S Dup	10/22/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-26S	03/16/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
P2RI-26S	06/14/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-26S	09/20/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0025 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-26D	11/12/10	0.0034	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.42	ND(0.0005)	ND(0.0005)	0.0021 J	0.0007 J	0.034	0.023	0.057
P2RI-26D	03/16/11	0.0042 J	ND(0.002) UJ	ND(0.002)	ND(0.002) UJ	ND(0.002)	ND(0.002)	0.36 J	ND(0.002)	ND(0.002)	0.0024 J	ND(0.002) UJ	0.032 J	0.021 J	0.054 J
P2RI-26D Dup	03/16/11	0.0044 J	ND(0.002) UJ	ND(0.002)	ND(0.002) UJ	ND(0.002)	ND(0.002)	0.36 J	ND(0.002)	ND(0.002)	0.0025 J	ND(0.002) UJ	0.033 J	0.022 J	0.054 J
P2RI-26D	06/14/11	0.0029 J	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.39	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.027	0.017	0.044
P2RI-26D	09/20/11	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.5	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.036	0.027	0.063
P2RI-27S	03/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27S	06/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27S	09/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27S	12/07/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-27D	06/28/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-27D	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-27D	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-27D	03/20/12	0.0002	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0012	ND(0.0001)	ND(0.0001)	0.0002	ND(0.0001)	0.0008	0.0004	0.0012
P2RI-27DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-28S	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-28S	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-28S	05/20/12	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-29S	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-29S	03/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-29S	05/18/12	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-30S	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-30S	03/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-30S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-31S	12/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-31S	03/22/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-31S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
P2RI-32S	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-32S	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-32S	05/20/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-33S	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33S	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D	11/04/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D	03/17/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0005 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J	0.0002 J	0.0005 J
P2RI-33D Dup	03/17/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0006	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0004 J	0.0002 J	0.0005
P2RI-33D	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D Dup	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-33D Dup	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-34S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0007	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J	0.0003 J	0.0006
P2RI-34D	03/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0001 J
P2RI-34D	06/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-34D	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	11/03/10	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S Dup	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-35D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36S	03/14/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36S	06/09/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-36DF [a]	03/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37S	03/17/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-37S	06/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37S	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	06/27/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D Dup	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-37D	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002	ND(0.0001)	0.0002
P2RI-37D Dup	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002	ND(0.0001)	0.0002
P2RI-38S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-40S	03/10/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-40S	06/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-40S	09/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-41S	11/15/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-41S	03/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-41S [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41D	11/05/10	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0001 J
P2RI-41D	03/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0008 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0001 J	0.0003 J
P2RI-41D	06/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	0.0001 JB
P2RI-41D	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0001 J

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
P2RI-43S	11/03/10	0.03	0.014	ND(0.0005)	0.0012 J	ND(0.0005)	ND(0.0005)	0.72	ND(0.0005)	ND(0.0005)	0.079	0.059	0.41	0.46	0.87
P2RI-43S	03/16/11	0.073 J	0.034 J	ND(0.0005)	0.038 J	ND(0.0005)	ND(0.0005)	1.7 J	ND(0.0005)	ND(0.0005)	0.21 J	0.073 J	1.1 J	0.73 J	1.9 J
P2RI-43S	06/11/11	0.049	0.016	ND(0.002)	0.013	ND(0.002)	ND(0.002)	2	ND(0.002)	ND(0.002)	0.16	0.063	0.87	0.6	1.5
P2RI-43S	09/19/11	0.086	0.025	ND(0.002)	0.025	ND(0.002)	ND(0.002)	1.9	ND(0.002)	ND(0.002)	0.18	0.063	0.91	0.63	1.5
P2RI-43D	03/30/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-43D	06/11/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	0.0001 JB
P2RI-43D	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-43D	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44S [a]	11/05/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44SR	06/10/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR Dup	06/10/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR Dup	09/16/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-44SR	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-44SR	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001	ND(0.0001)	0.0001
P2RI-44SR Dup	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002	ND(0.0001)	0.0002
P2RI-44D	03/10/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-44D	06/10/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 JB	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-44D	09/16/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-44D	12/06/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-45S	11/03/10	0.0057	0.0021 J	ND(0.0005)	0.0015 J	ND(0.0005)	ND(0.0005)	0.024	ND(0.0005)	ND(0.0005)	0.014	0.013	0.054	0.0031	0.058
P2RI-45S	03/16/11	0.061 J	0.0066 J	ND(0.0005)	0.0087 J	ND(0.0005)	ND(0.0005)	0.035 J	ND(0.0005)	ND(0.0005)	0.045 J	0.015 J	0.092 J	0.0029 J	0.094 J
P2RI-45S Dup	03/16/11	0.47 J	0.035 J	ND(0.002)	0.043 J	ND(0.002)	ND(0.002)	0.26 J	ND(0.002)	ND(0.002)	0.24 J	0.084 J	0.61 J	0.021 J	0.64 J
P2RI-45S	06/11/11	0.23	0.015	ND(0.0005)	0.018	ND(0.0005)	ND(0.0005)	0.061	ND(0.0005)	ND(0.0005)	0.11	0.036	0.19	0.0055	0.2
P2RI-45S	09/19/11	0.14	0.0062	ND(0.0005)	0.0063	ND(0.0005)	ND(0.0005)	0.022	ND(0.0005)	ND(0.0005)	0.043	0.016	0.055	0.0018 J	0.057
P2RI-45D	06/28/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-45D	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-45D	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-45D	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0007	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	0.0003
P2RI-46S	11/03/10	0.032	0.0093	ND(0.001)	0.007	ND(0.001)	ND(0.001)	0.23	ND(0.001)	ND(0.001)	0.063	0.059	0.29	0.15	0.44
P2RI-46S	03/15/11	0.035	0.0066	ND(0.001)	0.0082	ND(0.001)	ND(0.001)	0.075	ND(0.001)	ND(0.001)	0.055	0.035	0.16	0.091	0.26
P2RI-46S	06/11/11	0.0031 J	0.0012 J	ND(0.001)	0.0012 J	ND(0.001)	ND(0.001)	0.02	ND(0.001)	ND(0.001)	0.011	0.021	0.031	0.049	0.08
P2RI-46S	09/19/11	0.0024 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.014	ND(0.001)	ND(0.001)	0.0084	0.017	0.022	0.033	0.055
P2RI-46D	12/16/10	0.075	0.0044	ND(0.0002)	0.0045	ND(0.0002)	ND(0.0002)	0.028	ND(0.0002)	ND(0.0002)	0.013	0.0091	0.057	0.032	0.089
P2RI-46D	03/15/11	0.36	0.013	ND(0.001)	0.013	ND(0.001)	ND(0.001)	0.032	ND(0.001)	ND(0.001)	0.029	0.04 J	0.081	0.065	0.15
P2RI-46D	06/11/11	0.11	0.0033	ND(0.0005)	0.0026	ND(0.0005)	ND(0.0005)	0.034	ND(0.0005)	ND(0.0005)	0.0082	0.013	0.038	0.033	0.071
P2RI-46D	09/19/11	0.069	0.0023 J	ND(0.0005)	0.0017 J	ND(0.0005)	ND(0.0005)	0.04	ND(0.0005)	ND(0.0005)	0.0045	0.0079	0.031	0.028	0.059
P2RI-46DFL	12/16/10	0.0004 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0019	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	0.0007	0.0004 J	0.0011
P2RI-46DFL	03/15/11	0.0005 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0017	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	0.0007	0.0005 J	0.0011
P2RI-46DFL	06/13/11	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 JB	0.0003 JB	0.0007 JB
P2RI-46DFL	09/19/11	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 JB	0.0003 J	0.0006 JB
P2RI-47DF [a]	03/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	06/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFU	06/28/11	0.0083	0.0008	ND(0.0001)	0.0007	ND(0.0001)	ND(0.0001)	0.017	ND(0.0001)	ND(0.0001)	0.0028	0.0014	0.013	0.0038	0.016
P2RI-46DFU	09/19/11	0.013	0.0006	ND(0.0001)	0.0006	ND(0.0001)	ND(0.0001)	0.0081	ND(0.0001)	ND(0.0001)	0.0027	0.0012	0.0088	0.0024	0.011
P2RI-46DFU	12/09/11	0.0004 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0016 JB	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0008	0.0003 J	0.001
P2RI-46DFU	03/21/12	0.0012	0.0002	ND(0.0001)	0.0001	ND(0.0001)	ND(0.0001)	0.0032	ND(0.0001)	ND(0.0001)	0.0006	0.0004	0.0026	0.001	0.0035
P2RI-47S	11/05/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-47S	03/17/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-47S	06/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-47S	09/20/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-47DF	03/17/11	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0047	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)	0.0014	0.0011	0.0024
P2RI-47DF	06/14/11	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0013	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0004 J	0.0003 J	0.0006
P2RI-48S	11/03/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-48S	03/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-48S	06/14/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-48S	09/17/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-49S	11/05/10	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
P2RI-49S	12/09/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-49S	03/11/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-49S	06/14/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-50S	12/09/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	03/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0005 J	ND(0.0005)	0.0007 J	ND(0.0005)	0.0007 J
P2RI-50S	06/11/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	09/16/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-50S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0011 J	ND(0.001)	0.0014 J	ND(0.001)	0.0014 J

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
P2RI-51S	12/16/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0005 J	0.0014 J	ND(0.0005)	0.0014 J
P2RI-51S	03/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	06/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	09/12/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	12/03/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0006 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	03/17/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-51S	05/17/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-52S	06/28/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52S	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-52DF	06/28/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0009 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0002 J	0.0003 J
P2RI-52DF	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0014	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0002 J	0.0004 J
P2RI-52DF	12/08/11	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0023	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0007	0.0005 J	0.0012
P2RI-52DF	03/21/12	0.0001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0017	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004	0.0003	0.0008
P2RI-53S	06/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0018 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S	09/16/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0016 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S Dup	09/16/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0016 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0022 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S Dup	12/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0021 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-53S	03/22/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0015	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-54SU	06/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SU	09/16/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SU	12/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SU	03/20/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-54SM	06/15/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM	05/20/12	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SM Dup	05/20/12	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-54SL	06/27/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 JB	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SL	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-54SL	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	0.0003
P2RI-54SL	05/20/12	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0002 J	ND(0.0001)	0.0002 J
P2RI-55S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-55S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-55S	05/20/12	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-55DF [a]	11/30/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	05/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S	12/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-56S [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	05/16/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	0.18	0.015	ND(0.0005)	0.004	ND(0.0005)	ND(0.0005)	0.19	ND(0.0005)	ND(0.0005)	0.094	0.064	0.24	0.4	0.64
P2RI-56DF	03/22/12	0.032	0.0023	ND(0.0005)	0.0005	ND(0.0005)	ND(0.0005)	0.036	ND(0.0005)	ND(0.0005)	0.01	0.019	0.023	0.076	0.1
P2RI-56DF	05/21/12	0.0059	0.0006 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.019	ND(0.0005)	ND(0.0005)	0.0016 J	0.0049	0.007	0.0071	0.014
P2RI-57S	12/07/11	0.0001 J	0.0003 J	0.0006	0.0002 J	ND(0.0001)	ND(0.0001)	0.0016 JB	ND(0.0001)	ND(0.0001)	0.0002 J	0.0007	0.0011	0.0035	0.0046
P2RI-57S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-57S	05/20/12	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0002 J	0.0004 J
P2RI-58S	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-58S	03/20/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-58S	05/20/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	03/20/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S Dup	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-60S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
P2RI-60S Dup	12/07/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-60S	03/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-60S Dup	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-60S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0014 J	ND(0.001)	0.0048 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J	ND(0.001)	0.001 J
P2RI-60S Dup	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0013 J	ND(0.001)	0.0043 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J	ND(0.001)	0.001 J
P2RI-61S	12/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-61S	03/21/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
P2RI-61S Dup	03/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-61S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-62S	12/08/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-62S	03/22/12	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
P2RI-62S	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	12/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	03/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	05/20/12	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
GW-A	03/09/11	0.0006	0.0003 J	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	0.011	ND(0.0001)	ND(0.0001)	0.0013	0.0007	0.0083	0.0011	0.0093
GW-A	06/27/11	0.0008	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0012	ND(0.0001)	ND(0.0001)	0.0002 J	0.0001 J	0.0005 J	0.0001 J	0.0006
GW-A	09/13/11	0.0003 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0008	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0004 J	ND(0.0001)	0.0004 J
GW-A	12/06/11	0.0005	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0018	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	0.0006	0.0001 J	0.0007
GW-C-24	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-24	06/07/11	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-24	09/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-24	12/06/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-25	06/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-25	09/12/11	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-25	12/05/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-25	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-C-29	10/21/10	0.016	0.0022	ND(0.0002)	0.002	ND(0.0002)	ND(0.0002)	0.0029	ND(0.0002)	ND(0.0002)	0.0077	0.0049	0.019	0.0027	0.021
GW-C-29	03/14/11	0.0078	0.0014 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0018 J	ND(0.0005)	ND(0.0005)	0.0018 J	0.0006 J	0.0051	0.0008 J	0.0059
GW-C-29	06/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-29	09/15/11	0.0007 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-29 Dup	09/15/11	0.0008 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	11/03/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	06/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-45	09/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-C-46S	03/09/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S Dup	03/09/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S	06/08/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S	09/14/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46S	12/06/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-C-46DF	03/09/11	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0031	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0004 J	0.0003 J	0.0008 J
GW-C-46DF	09/13/11	ND(0.0002) UJ	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002) UJ	0.001 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 J	ND(0.0002)	0.0003 J
GW-C-46DF	12/06/11	0.0003 J	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.001 JB	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0005 J	0.0003 J	0.0008 J
GW-C-46DF	03/19/12	0.0007	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0025	ND(0.0002)	ND(0.0002)	0.0006	0.0002	0.0019	0.0012	0.0031
GW-C-47S	11/03/10	0.34	0.037	ND(0.002)	0.041	ND(0.002)	ND(0.002)	0.73	ND(0.002)	ND(0.002)	0.26	0.093	0.86	0.32	1.2
GW-C-47S	03/14/11	0.26	0.035	ND(0.002)	0.036	ND(0.002)	ND(0.002)	0.46	ND(0.002)	ND(0.002)	0.35	0.14	0.88	0.3	1.2
GW-C-47S	06/08/11	0.23	0.012	ND(0.002)	0.013	ND(0.002)	ND(0.002)	0.29	ND(0.002)	ND(0.002)	0.14	0.053	0.33	0.11	0.44
GW-C-47S	12/06/11	0.21	0.014 J	ND(0.005)	0.017 J	ND(0.005)	ND(0.005)	0.27	ND(0.005)	ND(0.005)	0.12	0.039	0.2	0.093	0.3
GW-C-47DF	03/12/11	0.043	0.01	ND(0.0005)	0.012	ND(0.0005)	ND(0.0005)	0.042	ND(0.0005)	ND(0.0005)	0.071	0.025	0.1	0.026	0.13
GW-C-47DF	06/07/11	0.0079 J	ND(0.002)	ND(0.002)	0.0022 J	ND(0.002)	ND(0.002)	0.016	ND(0.002)	ND(0.002)	0.0088 J	0.0039 J	0.016	0.0069 J	0.023
GW-C-47DF	03/21/12	0.0063	0.0017	ND(0.001)	0.0019	ND(0.001)	ND(0.001)	0.019	ND(0.001)	ND(0.001)	0.0075	0.0031	0.024	0.0074	0.031
GW-C-47DF	05/20/12	0.0047 J	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.019	ND(0.002)	ND(0.002)	0.0076 J	0.0031 J	0.025	0.0078 J	0.032
GW-C-48	03/11/11	0.001 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.016 J	ND(0.001)	ND(0.001)	0.0023 J	0.0016 J	0.013 J	0.011 J	0.024 J
GW-C-48 Dup	03/11/11	0.0015 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.054 J	ND(0.001)	ND(0.001)	0.0043 J	0.0031 J	0.032 J	0.025 J	0.057 J
GW-C-48	06/11/11	0.0017 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.028	ND(0.001)	ND(0.001)	0.0048 J	0.0025 J	0.044	0.028	0.072
GW-C-48 Dup	06/11/11	0.0015 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.028	ND(0.001)	ND(0.001)	0.005	0.0024 J	0.044	0.028	0.073
GW-C-48	09/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.013	ND(0.001)	ND(0.001)	0.0048 J	0.0022 J	0.028	0.018	0.046
GW-C-48	12/06/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0035 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0049 J	0.0036 J	0.0086
GW-C-48 Dup	12/06/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0038 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0051	0.0038 J	0.0088
GW-CS	03/11/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	06/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	09/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	12/06/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CD	12/05/11	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	0.0003 J	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	ND(0.0002) R	0.0003 J	ND(0.0002) R	0.0003 J
GW-CD	03/19/12	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0002	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)
GW-CD	05/20/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CDF [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ES	12/15/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0032 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0023 J	0.0066	0.0089
GW-ES Dup	12/15/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0019 J	0.0065	0.0084
GW-ES	03/15/11	0.0029 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0024 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.012	0.012
GW-ES	06/08/11	0.0027 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.017	0.017
GW-ES	09/15/11	0.003 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.016	0.016
GW-ED	12/17/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0008 J	ND(0.0005)	0.0008 J
GW-ED	03/15/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001 J	0.0001 J
GW-ED	06/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0016 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-ED	09/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-FS	10/21/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-FS	03/08/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-FS	06/07/11	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-FS	09/13/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)

TABLE 4.6-2. ANALYTICAL RESULTS, VOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
GW-GS	10/22/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-GS	03/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-GS	06/07/11	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-GS	09/13/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	11/16/10	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	03/09/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	06/27/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-H	09/12/11	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-K	06/07/11	0.11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.054	ND(0.001)	ND(0.001)	0.0024 J	0.001 J	0.012	0.0081	0.02
GW-K	09/12/11	0.21 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	0.061	ND(0.001)	ND(0.001)	0.0034 J	0.0013 J	0.017	0.01	0.028
GW-K	12/06/11	0.12	ND(0.001)	ND(0.001)	0.0011 J	ND(0.001)	ND(0.001)	0.06	ND(0.001)	ND(0.001)	0.004 J	0.0013 J	0.016	0.0092	0.025
GW-K	03/19/12	0.074	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.062	ND(0.001)	ND(0.001)	0.003	0.0011	0.013	0.0092	0.022
GW-L	06/07/11	ND(0.0001) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0002 J	0.0001 J	0.0003 J
GW-L	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-L	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
GW-L	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0001	ND(0.0001)	0.0001
GW-MS	10/21/10	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	0.0003 J	0.0003 J	ND(0.0002)	0.0003 J
GW-MS	03/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MS Dup	03/14/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MS	06/08/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0011 JB	ND(0.0005)	ND(0.0005)	0.0009 J	ND(0.0005)	0.0023 JB	0.0005 JB	0.0028 JB
GW-MS	09/15/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-MDF	03/12/11	0.34	0.017	ND(0.001)	0.017	ND(0.001)	ND(0.001)	0.051	ND(0.001)	ND(0.001)	0.084	0.033	0.19	0.02	0.21
GW-MDF	06/08/11	0.14	0.0086	ND(0.001)	0.0087	ND(0.001)	ND(0.001)	0.026	ND(0.001)	ND(0.001)	0.043	0.017	0.092	0.011	0.1
GW-MDF	09/13/11	0.045	0.0031 J	ND(0.001)	0.0028 J	ND(0.001)	ND(0.001)	0.011	ND(0.001)	ND(0.001)	0.014	0.0056	0.028	0.0033 J	0.031
GW-MDF	12/06/11	0.043	0.0041 J	ND(0.001)	0.0047 J	ND(0.001)	ND(0.001)	0.012	ND(0.001)	ND(0.001)	0.015	0.0079	0.027	0.0039 J	0.031
GW-NS	12/17/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0012 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0034 J	ND(0.001)	0.0034 J
GW-NS	03/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	06/07/11	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	09/14/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	12/05/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	03/19/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-NS	05/20/12	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	12/15/10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0024 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0029 J	ND(0.001)	0.0029 J
GW-ND	03/15/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	06/07/11	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	09/14/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	12/06/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	03/19/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-ND	05/18/12	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
PA-5R	12/10/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
PA-5R	03/22/12	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
PA-5R	05/21/12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Groundwater Standard or RBSL		0.25	0.39	0.03	0.53	0.1	0.005	1	0.2	0.005	0.015	0.087	10	10	10

Notes:
[a] - Sample not collected due to insufficient water volume
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)
P2RI-1S	01/27/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.000011)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-1S	06/22/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000094)	ND(0.0000094)	ND(0.0000094)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000094)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-1S	09/21/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-1S	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000011	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-1D [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	03/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D	09/13/11	ND(0.0002)	ND(0.0002)	ND(0.01)	ND(0.0002) [1]	ND(0.0002) [1]	ND(0.0002) [1]	ND(0.0002)	ND(0.004)	ND(0.0002)	ND(0.002)	ND(0.0002) [1]	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)
P2RI-2 [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	09/23/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	10/28/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2	03/15/11	ND(0.001)	ND(0.001)	ND(0.007)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	0.004 J	ND(0.001)	ND(0.001)	ND(0.001) [1]	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.003)	ND(0.004)
P2RI-3S	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3S	03/15/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-3S	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005) UJ	ND(0.001) UJ [1]	ND(0.001) UJ [1]	ND(0.001) UJ [1]	ND(0.001) UJ	ND(0.002) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ [1]	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.003) UJ
P2RI-3S	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-3D [a]	02/18/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	09/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D	03/15/11	ND(0.005)	ND(0.005)	ND(0.025)	ND(0.005) [1]	ND(0.005) [1]	ND(0.005) [1]	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005) [1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.015)
P2RI-4S [a]	10/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S	03/21/12	ND(0.0002)	ND(0.0002)	ND(0.011)	ND(0.0002) [1]	--	--	ND(0.0002)	ND(0.004)	ND(0.0002)	--	--	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)
P2RI-4S [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4D	01/27/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.00001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-4D	06/22/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-4D	09/21/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098)	ND(0.0000098) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-4D	10/26/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-5	01/29/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-5	06/22/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-5	09/23/10	ND(0.001)	ND(0.001)	ND(0.006) R	ND(0.000012)	0.00013	ND(0.000012)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.004)
P2RI-5	10/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-5	03/15/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000012)	ND(0.000012)	ND(0.000012)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-5	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-5S	06/28/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.01) [1]	ND(0.01) [1]	ND(0.01) [1]	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.01) [1]	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-5S	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-5S	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.002 J
P2RI-5S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000095)	ND(0.000095)	ND(0.000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.001
P2RI-6	01/29/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	0.025	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-6	06/23/10	ND(0.01)	ND(0.01)	ND(0.05)	0.000017 J	ND(0.00001) UJ	0.000022 J	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.00001) UJ	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-6	09/23/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-6	10/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-7 [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-9S	01/29/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.01)	0.032 J	ND(0.01)	ND(0.01)	ND(0.00001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-9S	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-9S	09/21/10	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.000012) UJ	ND(0.000012)	ND(0.000012) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000012) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-9S	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-9D	01/29/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-9D	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-9D	09/21/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095) UJ	ND(0.0000095)	ND(0.0000095) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) R
P2RI-9D	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-10S [a]	01/29/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10S [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10S	09/20/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000017)	ND(0.000017)	ND(0.000017)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000017)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-10S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	09/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11S	01/29/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	0.006	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-11S	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-11S	09/21/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011) UJ	ND(0.000011)	ND(0.000011) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-11S Dup	09/21/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000012) UJ	ND(0.000012)	ND(0.000012) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000012) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-11S	10/27/10	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-11S Dup	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000015	0.000012	0.000016	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-11D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000024 J	0.000022 J	0.000029 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-12	09/22/10	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.004)
P2RI-12	10/25/10	--	--	--	ND(0.000011) UJ	ND(0.000011) UJ	ND(0.000011) UJ	--	--	--	--	ND(0.000011) UJ	--	--	--	--	--
P2RI-12	03/30/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-13 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	01/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-14 [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	09/22/10	ND(0.001)	ND(0.001)	ND(0.006)	0.000013 J	0.000012 J	0.000029 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-14	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-15 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16S	06/24/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16S	09/22/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000012)	ND(0.000012)	ND(0.000012)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16S	10/26/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)
P2RI-16D	03/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	0.00002 J	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16D Dup	03/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001) UJ	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16D	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16D Dup	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-16D	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-16D Dup	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-16D	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-16D Dup	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-17	01/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-17	06/24/10	ND(0.005)	ND(0.005)	ND(0.025)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.000011)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.015)
P2RI-17	09/20/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000012)	ND(0.000012)	ND(0.000012)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-17	10/25/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18	01/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18 Dup	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18SR	11/05/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18SR	03/30/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18SR	06/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18SR	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-18D	11/04/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18D Dup	11/04/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18D	06/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-18D	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-18D	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-19S	01/28/10	ND(0.01) UJ	ND(0.01)	ND(0.05)	0.000012 J	ND(0.00001)	0.000013 J	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.00001)	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.02) UJ	ND(0.03)
P2RI-19S	06/24/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000012 J	ND(0.00001)	ND(0.00001)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-19S	09/22/10	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-19S	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-19D	11/16/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-19D	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-19D	06/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-19D	09/15/11	ND(0.00009)	ND(0.00009)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-19D Dup	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-20	01/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-20 Dup	01/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-20	06/24/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-20	09/20/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-20 Dup	09/20/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-20	10/25/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-20 Dup	10/25/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-21S	11/05/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-21S	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
P2RI-21S	06/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-21S	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-21D [4]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-21D	03/09/11	ND(0.01) UJ	ND(0.01) UJ	ND(0.05) UJ	--	--	--	ND(0.01) UJ	ND(0.02) UJ	ND(0.01) UJ	ND(0.01) UJ	--	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.02) UJ	ND(0.03) UJ
P2RI-21D	06/10/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.01)[1]	ND(0.01)[1]	ND(0.01)[1]	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.01)[1]	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.02)	ND(0.03)
P2RI-21D	09/14/11	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.001)[1]	ND(0.001)[1]	ND(0.001)[1]	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.001)[1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-22S	01/27/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.000011)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-22S	06/24/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22S Dup	06/24/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22S	09/22/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22S	10/26/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22D	01/27/10	ND(0.01)	ND(0.01)	ND(0.05)	0.00018 J	0.00021 J	0.0003 J	ND(0.01)	0.22	ND(0.01)	ND(0.01)	ND(0.0001) UJ	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-22D	06/24/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000023 J	0.00024 J	0.000035 J	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22D	09/22/10	ND(0.001)	ND(0.001)	0.005 J	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22D	10/26/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-22D	06/09/11	ND(0.001) UJ	ND(0.001)	ND(0.005)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.0000097)	ND(0.001)	0.005 J	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
P2RI-22D	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-23S	01/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-23S	06/23/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-23S	09/22/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-23S	10/27/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-23D	11/11/10	ND(0.0009)	ND(0.0009)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011) UJ	ND(0.0009)	ND(0.002)	ND(0.0009)	ND(0.0009)	ND(0.000011)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.003)
P2RI-23D	03/15/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-23D	06/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099) UJ	ND(0.0000099) UJ	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-23D	09/16/11	ND(0.00009)	ND(0.00009)	ND(0.005) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-24S [3]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [3]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [3]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [3]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	0.000014 J	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-24D	03/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-24D	06/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099) UJ	ND(0.0000099) UJ	0.000012 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-24D	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-25S	01/27/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.000011)	ND(0.000011)	0.000016 J	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	0.000014 J	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-25S	06/24/10	ND(0.0009)	ND(0.0009)	ND(0.005) R	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0009)	ND(0.002)	ND(0.0009)	ND(0.0009)	ND(0.0000098) UJ	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.003)
P2RI-25S	09/22/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-25S	10/28/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-25D	11/11/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-25D Dup	11/11/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-25D	03/16/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-25D Dup	03/16/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	0.004 J	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-25D	06/11/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) R
P2RI-25D	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-26S	10/22/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26S Dup	10/22/10	ND(0.001)	ND(0.001)	ND(0.006) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26S	03/16/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011) UJ	ND(0.000011) UJ	ND(0.000011) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26S	06/14/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26S	09/20/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-26D	11/12/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) R
P2RI-26D	03/16/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26D Dup	03/16/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000095) UJ	ND(0.0000095) UJ	ND(0.0000095) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26D	06/14/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-26D	09/20/11	ND(0.00009)	ND(0.00009)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-27DF [5]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [5]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [5]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [5]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)
P2RI-27S	03/10/11	ND(0.001)	ND(0.001)	ND(0.005)	--	--	--	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	--	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-27S	06/14/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-27S	09/14/11	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.000011)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-27S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-27D	06/28/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-27D	09/14/11	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.0001)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-27D	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	0.000013 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-27D	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	0.000011	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-28S	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.007) R	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001)	ND(0.003)	ND(0.0001)	ND(0.001)	ND(0.0001) [1]	ND(0.0007)	ND(0.0007)	ND(0.0007)	ND(0.003)	ND(0.0007)
P2RI-28S	03/21/12	ND(0.0002)	ND(0.0002)	ND(0.008)	--	--	--	ND(0.0002)	ND(0.003)	ND(0.0002)	ND(0.002)	--	ND(0.0008)	ND(0.0008)	ND(0.0008)	ND(0.003)	ND(0.0008)
P2RI-28S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000036)	ND(0.000036)	ND(0.000036)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000036)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-29S	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-29S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-29S	05/18/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-30S	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-30S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000098)	ND(0.000098)	ND(0.000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-30S	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000093)	ND(0.000093)	ND(0.000093)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000093)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-31S	12/10/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-31S	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-31S	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-32S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-32S	03/21/12	ND(0.001)	ND(0.001)	ND(0.057)	--	--	--	ND(0.001)	ND(0.023)	0.001	ND(0.011)	--	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.023)	ND(0.006)
P2RI-32S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	0.000077	0.00013	0.00012	ND(0.0001)	ND(0.002)	0.0004 J	ND(0.001)	0.000021 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-33S	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-33S	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-33S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-33S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-33D	11/04/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-33D	03/17/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-33D Dup	03/17/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-33D	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-33D Dup	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-33D	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-33D Dup	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-34S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000023 J	0.000038 J	0.000058	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-34D	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-34D	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-34D	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-35S	11/03/10	ND(0.01)	ND(0.01)	ND(0.05)	0.000014 J	0.000012 J	0.000023 J	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0000098)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03) UJ
P2RI-35S	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-35S Dup	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-35S	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-35S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-35D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000011 J	ND(0.00001)	0.000016 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-36S	03/14/11	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-36S	06/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-36S	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	0.000011 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-36DF [a]	03/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) UJ
P2RI-37S	03/17/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-37S	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-37S	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.006)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0006)	ND(0.0006)	ND(0.0006)	ND(0.002)	ND(0.0006)
P2RI-37D	06/27/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-37D	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-37D	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-37D Dup	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-37D	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-37D Dup	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-38S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
P2RI-40S	03/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-40S	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.00001)	ND(0.00001) UJ	0.000013 J	ND(0.001)	0.003 J	ND(0.001) UJ	ND(0.001)	ND(0.00001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
P2RI-40S	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-41S [a]	11/15/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	03/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41D	11/05/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-41D	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-41D	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-41D	09/17/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-43S	11/03/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03) UJ
P2RI-43S	03/16/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.00005) UJ	ND(0.00005) UJ	ND(0.00005) UJ	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.00005) UJ	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-43S	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	0.003 J
P2RI-43S	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-43D	03/30/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-43D	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-43D	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-43D	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44S [a]	11/05/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)
P2RI-44SR	06/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-44SR Dup	06/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-44SR	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44SR Dup	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44SR	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44SR	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	0.000015	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44SR Dup	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44D	03/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-44D	06/10/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-44D	09/16/11	ND(0.00009)	ND(0.00009)	ND(0.005) UJ	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-44D	12/06/11	0.0001 J	ND(0.0001)	ND(0.005) R	0.000011 J	0.000012 J	0.000021 J	ND(0.0001)	0.003 J	0.0001 J	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-45S	11/03/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) UJ
P2RI-45S	03/16/11	ND(0.001)	ND(0.001)	ND(0.005)	0.000011 J	ND(0.00001) UJ	0.000018 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-45S Dup	03/16/11	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-45S	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-45S	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-45D	06/28/11	ND(0.001)	ND(0.001)	ND(0.005)	0.00017 J	0.00015 J	0.00021 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-45D	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-45D	12/09/11	0.0001 J	ND(0.0001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-45D	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-46S	11/03/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) UJ
P2RI-46S	03/15/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.000011)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-46S	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-46S	09/19/11	ND(0.001)	ND(0.0001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-46D	12/16/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.01)[1]	ND(0.01)[1]	ND(0.01)[1]	ND(0.01)	0.068	ND(0.01)	ND(0.01)	ND(0.01)[1]	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-46D [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFL	12/16/10	ND(0.01)	ND(0.01)	ND(0.05)	0.0001 J	ND(0.0001)	0.0002 J	ND(0.01)	0.025 J	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-46DFL	03/15/11	ND(0.005)	ND(0.005)	ND(0.025)	ND(0.005)[1]	ND(0.005)[1]	ND(0.005)[1]	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)[1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.015)
P2RI-46DFL	06/13/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)[1]	ND(0.001)[1]	ND(0.001)[1]	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.001)[1]	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-46DFL	09/19/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.002)	ND(0.0005)
P2RI-46DFU	06/28/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.01)[1]	ND(0.01)[1]	ND(0.01)[1]	ND(0.01)	0.062	ND(0.01)	ND(0.01)	ND(0.01)[1]	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	0.034 J
P2RI-46DFU	09/19/11	ND(0.001)	ND(0.001)	ND(0.005)	0.00063 J	0.00077 J	0.0011 J	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	0.00017 J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-46DFU	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000097)	ND(0.0000097)	0.00001 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.005
P2RI-46DFU	03/21/12	0.001	ND(0.001)	ND(0.05)	0.000015	0.000018	0.000024	ND(0.001)	ND(0.02)	0.002	ND(0.001)	ND(0.00001)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-47S	11/05/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000013 J	ND(0.00001)	0.000033 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-47S	03/17/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	0.00001 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-47S	06/14/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002)	ND(0.003)
P2RI-47S	09/20/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-47DF	03/17/11	ND(0.003)	ND(0.003)	ND(0.014)	ND(0.003)[1]	ND(0.003)[1]	ND(0.003)[1]	ND(0.003)	ND(0.006)	ND(0.003)	ND(0.003)	ND(0.003)[1]	ND(0.003)	ND(0.003)	ND(0.003)	ND(0.006)	ND(0.009)
P2RI-47DF [a]	06/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-48S	11/04/10	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)[1]	ND(0.002)[1]	ND(0.002)[1]	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)	ND(0.002)[1]	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.003)	ND(0.005) UJ
P2RI-48S	03/15/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-48S	06/14/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-48S	09/17/11	ND(0.00009)	ND(0.00009)	ND(0.005) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-49S	11/05/10	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.0000099) UJ	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-49S	12/09/10	ND(0.001)	ND(0.001)	ND(0.007)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.003)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.003) UJ	ND(0.004)
P2RI-49S	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-49S	06/14/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-50S	12/09/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
P2RI-50S	03/15/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-50S	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	0.000022 J	0.000016 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	0.000013 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-50S	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-50S	05/21/12	ND(0.0001) R	ND(0.0001) R	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001) R	ND(0.002) R	ND(0.0001) R	ND(0.001) R	ND(0.0000095)	ND(0.0005) R	ND(0.0005) R	ND(0.0005) R	ND(0.002) R	ND(0.0005)
P2RI-51S	12/16/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-51S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-51S	06/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-51S	09/12/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-51S	12/03/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-51S	03/17/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-51S	05/17/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-52S [a]	06/28/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	12/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52DF	06/28/11	ND(0.01)	ND(0.01)	ND(0.05)	0.00012 J	ND(0.0001)	0.00017 J	ND(0.01)	0.039 J	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
P2RI-52DF	09/14/11	0.0002 J	ND(0.0001)	ND(0.005) R	0.000015 J	0.000014 J	0.000023 J	ND(0.0001)	0.006	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.0007 J
P2RI-52DF	12/08/11	ND(0.001)	ND(0.001)	ND(0.05) R	ND(0.001)[1]	ND(0.001)[1]	ND(0.001)[1]	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.001)[1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-52DF	03/21/12	ND(0.001)	ND(0.001)	ND(0.05)	--	--	--	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	--	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
P2RI-53S	06/15/11	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-53S	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-53S Dup	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-53S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000095)	ND(0.000095)	ND(0.000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-53S Dup	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000095)	ND(0.000095)	ND(0.000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-53S	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SU	06/15/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-54SU	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SU	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SU	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SM	06/15/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-54SM	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SM	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SM	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SM Dup	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SL	06/27/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
P2RI-54SL	09/16/11	ND(0.0001)	ND(0.0001)	ND(0.005) UJ	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SL	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-54SL	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) R	ND(0.00001) R	ND(0.00001) R	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) R	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-55S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	0.000011 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-55S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-55S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-55DF [a]	11/30/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	05/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)
P2RI-56S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	05/16/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.014
P2RI-56DF	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.0006
P2RI-56DF	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000091)	ND(0.0000091)	ND(0.0000091)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000091)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-57S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-57S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-57S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-58S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-58S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-58S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-59S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-59S	03/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-59S	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-59S Dup	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-60S	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-60S Dup	12/07/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-60S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-60S Dup	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-60S	05/21/12	ND(0.0001) R	ND(0.0001) R	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001) R	ND(0.002) R	ND(0.0001) R	ND(0.001) R	ND(0.00001)	ND(0.0005) R	ND(0.0005) R	ND(0.0005) R	ND(0.002) R	ND(0.0005)
P2RI-60S Dup	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	0.000014 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-61S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	--	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-61S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-61S Dup	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-61S	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000094)	ND(0.0000094)	ND(0.0000094)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000094)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-62S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-62S	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-62S	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
P2RI-63S	12/08/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	0.002 J	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-63S	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
P2RI-63S	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-A	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	0.000011 J	0.000013 J	ND(0.0001)	0.014	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
GW-A	06/27/11	ND(0.01)	ND(0.01)	ND(0.05)	0.00033 J	0.00028 J	0.00046 J	ND(0.01)	0.1	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
GW-A	09/13/11	ND(0.001)	ND(0.001)	ND(0.05)	0.001 J [1]	0.001 J [1]	0.002 J [1]	ND(0.001)	0.042 J	0.002 J	ND(0.01)	ND(0.0001) UJ	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
GW-A	12/06/11	0.0001 J	ND(0.0001)	ND(0.005) R	0.000037 J	0.000039 J	0.000059	0.0001 J	0.009	0.0002 J	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-24	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
GW-C-24	06/07/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-24	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-24	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-25	06/07/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.000011)	ND(0.000011) UJ	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.000011)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-C-25	09/12/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-25	12/05/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-25	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) [1]	ND(0.00001) [1]	ND(0.00001) [1]	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) [1]	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-29	10/21/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-29	03/14/11	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-29	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.0000097)	ND(0.0000097) UJ	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.0000097)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-C-29	09/15/11	ND(0.00009) UJ	ND(0.00009)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
GW-C-29 Dup	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-45	11/03/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) UJ
GW-C-45	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
GW-C-45	06/08/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099) UJ	ND(0.0000099) UJ	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-45	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-46S	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
GW-C-46S Dup	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
GW-C-46S	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.00001)	ND(0.00001) UJ	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.00001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-C-46S	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-46S	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-46DF	03/09/11	ND(0.01)	ND(0.01)	ND(0.05)	0.0013 J	0.0011 J	0.0011 J	ND(0.01)	0.076	ND(0.01)	ND(0.01)	0.00044 J	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02) UJ	ND(0.03)
GW-C-46DF	09/13/11	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.001) [1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
GW-C-46DF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-46DF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47S	11/03/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000054	0.000019 J	0.000026 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003) UJ
GW-C-47S	03/14/11	ND(0.01)	ND(0.01)	ND(0.05) UJ	ND(0.00019)	ND(0.00019)	ND(0.00019)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.00019)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
GW-C-47S	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.0000098)	ND(0.0000098) UJ	0.000018 J	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.0000098)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-C-47S	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-47DF	03/12/11	ND(0.001)	ND(0.001)	ND(0.007)	--	--	--	ND(0.001)	0.012	ND(0.001)	ND(0.001)	--	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.003)	0.014 J
GW-C-47DF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47DF	03/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000016)	ND(0.000016)	ND(0.000016)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000016)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.01
GW-C-47DF	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000019)	ND(0.000019)	ND(0.000019)	ND(0.0001)	0.005	ND(0.0001)	ND(0.001)	ND(0.000019)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	0.009
GW-C-48	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-48 Dup	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-48	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-48 Dup	06/11/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-C-48	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-48	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-C-48 Dup	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-CS	03/11/11	ND(0.001)	ND(0.001)	ND(0.005)	--	--	--	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	--	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-CS	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.0000099)	ND(0.0000099) UJ	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.0000099)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-CS	09/14/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000012)	ND(0.000012)	ND(0.000012)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000012)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-CS	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.006)	ND(0.000011)	ND(0.000011)	ND(0.000011) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0006)	ND(0.0006)	ND(0.0006)	ND(0.002)	ND(0.0006)
GW-CD [a]	12/05/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CD	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.007)	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001)	ND(0.003)	ND(0.0001)	ND(0.001)	ND(0.0001) [1]	ND(0.0007)	ND(0.0007)	ND(0.0007)	ND(0.003)	ND(0.0007)
GW-CD [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ES	12/15/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	0.00021 J	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-ES Dup	12/15/10	ND(0.001)	ND(0.001)	ND(0.005)	0.000016 J	0.000012 J	0.000023 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	0.000013 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-ES	03/15/11	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-ES	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.00001)	ND(0.00001) UJ	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.00001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-ES	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.006) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0006)	ND(0.0006)	ND(0.0006)	ND(0.002)	ND(0.0006)
GW-ED	12/17/10	ND(0.01)	ND(0.01)	ND(0.05)	0.00039 J	0.00029 J	0.00049 J	ND(0.01)	0.078 J	ND(0.01)	ND(0.01)	0.00014 J	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
GW-ED	03/15/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.01) [1]	ND(0.01) [1]	ND(0.01) [1]	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.01) [1]	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
GW-ED	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.00001)	ND(0.00001) UJ	0.000014 J	ND(0.001)	0.005 J	ND(0.001) UJ	ND(0.001)	ND(0.00001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-ED	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)
GW-FS	10/21/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-FS	03/08/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-FS	06/07/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-FS	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-GS	10/22/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-GS	03/08/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-GS	06/07/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-GS	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-H [a]	11/16/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-H	03/09/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)
GW-H	06/27/11	ND(0.01)	ND(0.01)	ND(0.05)	0.00011 J	ND(0.0001)	0.00017 J	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
GW-H	09/12/11	ND(0.0001)	ND(0.0001)	ND(0.005)	0.000021 J	0.000017 J	0.000028 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-K [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-K	09/12/11	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0001) [1]	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-K	12/06/11	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.001) [1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
GW-K	03/19/12	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	ND(0.02)	ND(0.001)	ND(0.01)	ND(0.001) [1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
GW-L	06/07/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-L	09/13/11	ND(0.0001)	ND(0.0001)	ND(0.005)	0.00001 J	ND(0.0000097)	0.000015 J	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-L	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-L	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-MS	10/21/10	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-MS	03/14/11	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-MS Dup	03/14/11	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-MS	06/08/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005)	ND(0.0000096)	ND(0.0000096) UJ	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001) UJ	ND(0.001)	ND(0.0000096)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.003)
GW-MS	09/15/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-MDF [a]	03/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-MDF	06/08/11	ND(0.01) UJ	ND(0.01) UJ	ND(0.05) UJ	ND(0.01) UJ [1]	ND(0.01) UJ [1]	ND(0.01) UJ [1]	ND(0.01) UJ	0.58 J	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ [1]	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.02) UJ	ND(0.03) UJ
GW-MDF	09/13/11	0.001 J	ND(0.001)	ND(0.05)	0.001 J [1]	0.002 J [1]	0.002 J [1]	ND(0.001)	0.16	0.002 J	ND(0.01)	ND(0.001) [1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
GW-MDF	12/06/11	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	0.023 J	ND(0.001)	ND(0.01)	ND(0.001) [1]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)
GW-NS	12/17/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.0000012)	ND(0.0000012)	ND(0.0000012)	ND(0.01)	ND(0.02)	ND(0.01)	ND(0.01)	ND(0.0000012)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.03)
GW-NS	03/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.002) [1]	ND(0.002) [1]	ND(0.002) [1]	ND(0.002)	ND(0.004)	ND(0.002)	ND(0.002)	ND(0.002) [1]	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	ND(0.006)
GW-NS	06/07/11	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-NS	09/14/11	ND(0.0003)	ND(0.0003)	ND(0.016) R	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0003)	ND(0.006)	ND(0.0003)	ND(0.003)	ND(0.00001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.006)	ND(0.002)
GW-NS	12/05/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-NS	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-NS	05/20/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-ND	12/15/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001) UJ	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-ND	03/15/11	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-ND	06/07/11	ND(0.001)	ND(0.001)	ND(0.005) R	0.000014 J	0.000023 J	0.000027 J	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)
GW-ND	09/14/11	ND(0.00009)	ND(0.00009)	ND(0.005)	ND(0.000012)	ND(0.000012)	ND(0.000012)	ND(0.00009)	ND(0.002)	ND(0.00009)	ND(0.0009)	ND(0.000012)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-ND	12/06/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-ND	03/19/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
GW-ND	05/18/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
PA-5R	12/10/11	ND(0.0001)	ND(0.0001)	ND(0.005) R	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
PA-5R	03/22/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)
PA-5R	05/21/12	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)
Groundwater Standard or RBSL (mg/L):		0.67	2.1	0.013	0.0005	0.00005	0.0005	0.005	0.006	0.05	NA	0.00005	0.6	0.6	0.075	17	0.38

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Tetramethyl Lead (TML)[1] (mg/L)	Quinoline[1] (mg/L)
P2RI-1S	01/27/10	ND(0.02)	ND(0.02)	ND(0.2)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.000011)	ND(0.00001)	ND(0.01)	ND(0.01)	ND(0.02)	0.00002 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-1S	06/22/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000094)	ND(0.0000094)	ND(0.001)	ND(0.001)	ND(0.002)	0.000011 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-1S	09/21/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000011 JB	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-1S	10/27/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000018	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-1D [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	03/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-1D	09/13/11	ND(0.004)	ND(0.004)	ND(0.02)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.002)	ND(0.0002) [1]	ND(0.0002) [1]	0.0002 J	ND(0.001) UJ	ND(0.001)	ND(0.0002) [1]	ND(0.02)	ND(0.0002)	ND(0.001)	ND(0.0002)	ND(0.004)	--	--	ND(0.002)
P2RI-2 [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	09/23/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2 [a]	10/28/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-2	03/15/11	ND(0.003)	ND(0.003)	ND(0.014)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	ND(0.001)	ND(0.003)	ND(0.001) [1]	ND(0.014)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.003)	--	--	ND(0.001)
P2RI-3S	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.002) UJ	--	--
P2RI-3S	03/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000033)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-3S	06/08/11	ND(0.002) UJ	ND(0.002) UJ	ND(0.01) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ [1]	ND(0.001) UJ [1]	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.001) UJ [1]	ND(0.01) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.003) UJ	--	ND(0.001) UJ
P2RI-3S	09/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-3D [a]	02/18/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	09/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-3D	03/15/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [1]	ND(0.005) [1]	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005) [1]	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	--	--	ND(0.005)
P2RI-4S [a]	10/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4S	03/21/12	ND(0.004)	ND(0.004)	ND(0.022)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.002)	--	0.004 [1]	ND(0.0002)	ND(0.001)	ND(0.001)	0.003 [1]	ND(0.022)	ND(0.0002)	ND(0.001)	ND(0.0002)	ND(0.004)	--	--	ND(0.002)
P2RI-4S [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-4D	01/27/10	ND(0.02)	ND(0.02)	ND(0.2)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.00001)	0.000022 J	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.00001)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-4D	06/22/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000016 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-4D	09/21/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000098) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-4D	10/26/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000095)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-5	01/29/10	ND(0.002)	ND(0.002)	ND(0.02) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	0.00025 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00062	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5	06/22/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	0.00008 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00019 JB	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5	09/23/10	ND(0.002)	ND(0.002)	ND(0.012) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000012)	0.000047 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00018	ND(0.012) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5	10/28/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000034 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00011	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5	03/15/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000012)	0.000017 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000044 J	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5	06/13/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.000013 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000074 JB	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5S	06/28/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01) [1]	ND(0.01) [1]	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.01) [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	--	--	ND(0.01)
P2RI-5S	09/19/11	ND(0.002)	ND(0.002)	ND(0.011) R	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	0.000016 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00015 JB	ND(0.011) R	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5S	12/09/11	ND(0.002)	ND(0.002)	ND(0.01) R	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	0.00053	0.001 JB	ND(0.0005)	0.002 J	0.003 [1]	ND(0.01) R	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-5S	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000095)	0.00027	0.0007	ND(0.0005)	ND(0.0005)	0.001 [1]	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-6	01/29/10	ND(0.002)	ND(0.002)	ND(0.019)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.01 J [1]	0.021	0.005	ND(0.002)	0.07 [1]	ND(0.01)	ND(0.001)	0.022	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-6	06/23/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.00001) UJ	0.017	0.042 J	ND(0.01)	ND(0.02)	0.11 [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-6	09/23/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001)	0.015	0.029 J	ND(0.01)	ND(0.02)	0.091 [1]	ND(0.1) UJ	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-6	10/28/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00005)	0.006 [1]	0.012	ND(0.001)	ND(0.002)	0.064 [1]	ND(0.01)	ND(0.001)	0.01	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-7 [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-7 [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-8 [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-9S	01/29/10	ND(0.02)	ND(0.02)	ND(0.2)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.00001)	ND(0.00001) UJ	ND(0.01)	ND(0.01)	ND(0.02)	0.000017 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-9S	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000012 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-9S	09/21/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000012) UJ	0.000015 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000012) UJ	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-9S	10/27/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-9D	01/29/10	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	0.000055 J	ND(0.001)	ND(0.002)	0.000092	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-9D	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.00003 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000031 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-9D	09/21/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095) UJ	ND(0.0000095) UJ	ND(0.001)	ND(0.001) R	ND(0.002) R	0.000018 J	ND(0.01)	ND(0.001)	ND(0.001) R	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-9D	10/27/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000023	ND(0.001)	ND(0.001)	ND(0.002)	0.000058	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-10S [a]	01/29/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10S [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10S	09/20/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000017)	ND(0.000017)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000017)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-10S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	09/17/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-10D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11S	01/29/10	ND(0.002)	ND(0.002)	ND(0.021)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00015 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00012	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	--	ND(0.001)
P2RI-11S	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	0.000021 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000019 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-11S	09/21/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011) UJ	0.000055 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000046 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-11S Dup	09/21/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000012) UJ	0.000031 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000029 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-11S	10/27/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00004	ND(0.001)	ND(0.001)	ND(0.002)	0.000045	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-11S Dup	10/27/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.000092	ND(0.001)	ND(0.001)	ND(0.002)	0.000088	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-11D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-11D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.000015 J	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	0.000013 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-12	09/22/10	ND(0.002)	ND(0.002)	ND(0.012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00005)	ND(0.00005)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00005)	ND(0.012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-12	10/25/10	--	--	--	--	--	--	--	ND(0.000011) UJ	ND(0.000011) UJ	--	--	--	ND(0.000011) UJ	--	--	--	--	--	ND(0.002) UJ	--	--
P2RI-12	03/30/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
P2RI-13 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-13 [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	01/28/10	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.0003 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00072	ND(0.01)	ND(0.001)	0.001 J	ND(0.001)	ND(0.002)	ND(0.003)	--	ND(0.001)
P2RI-14 [a]	06/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-14	09/22/10	ND(0.002)	ND(0.002)	ND(0.012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	0.00035	ND(0.001)	ND(0.001)	ND(0.002)	0.00074 J	ND(0.012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-14	10/27/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	0.000017 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000068	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-15 [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-15 [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.002)	0.000019 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16S	06/24/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	0.001 J	ND(0.002)	ND(0.000011)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16S	09/22/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000012)	ND(0.000012)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000012)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16S	10/26/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000016 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Tetramethyl Lead (TML)[1] (mg/L)	Quinoline[1] (mg/L)
P2RI-16D	03/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-16D Dup	03/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-16D	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16D Dup	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16D	09/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16D Dup	09/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16D	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-16D Dup	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-17	01/28/10	ND(0.002)	ND(0.002)	ND(0.019)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.001)	ND(0.002)	0.00021 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-17	06/24/10	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.000011)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.002)	--	ND(0.005)
P2RI-17	09/20/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000012)	ND(0.000012)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000012)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-17	10/25/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000097)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-18	01/28/10	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000096) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18 Dup	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18SR	11/05/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000015 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18SR	03/30/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-18SR	06/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18SR	09/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18D	11/04/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	0.000013 J	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18D Dup	11/04/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	0.000013 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18D	06/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18D	09/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-18D	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00012 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-19S	01/28/10	ND(0.02) UJ	ND(0.02)	ND(0.2)	ND(0.01) UJ	ND(0.01)	ND(0.01) UJ	ND(0.01) UJ	0.000012 J	0.000023 J	ND(0.01) UJ	ND(0.01)	ND(0.02)	0.000028 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02) UJ	ND(0.002)	--	ND(0.01) UJ
P2RI-19S	06/24/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-19S	09/22/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000011)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-19S	10/27/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	0.000011	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-19D	11/16/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002)	0.000015 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-19D	03/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000036 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-19D	06/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-19D	09/15/11	ND(0.002)	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.0000098)	ND(0.0000098)	ND(0.00009)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-19D Dup	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000033 J	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-20	01/28/10	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.002)	0.00001 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-20 Dup	01/28/10	ND(0.002)	ND(0.002)	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0001)	0.0011 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00033 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-20	06/24/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000098)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-20	09/20/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000011 JB	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-20 Dup	09/20/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000011)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-20	10/25/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000099)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-20 Dup	10/25/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	0.000016 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
P2RI-21S	11/05/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	0.000016 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000027 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-21S	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
P2RI-21S	06/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-21S	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-21D [a]	10/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-21D	03/09/11	ND(0.02) UJ	ND(0.02) UJ	ND(0.1) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	--	--	ND(0.01) UJ	ND(0.01) UJ	ND(0.02) UJ	--	ND(0.1) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.02) UJ	ND(0.02) UJ	ND(0.02) UJ	ND(0.01) UJ
P2RI-21D	06/10/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01) UJ	ND(0.01)	ND(0.01)	ND(0.01) UJ	ND(0.01) [1]	ND(0.01) [1]	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.01) [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02) UJ	ND(0.02)	--	ND(0.01)
P2RI-21D	09/14/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001) [1]	ND(0.001) [1]	0.001 J	ND(0.005) UJ	ND(0.005)	ND(0.001) [1]	ND(0.1)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.02)	--	--	ND(0.01)
P2RI-22S	01/27/10	ND(0.02)	ND(0.02)	ND(0.2)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.000011)	ND(0.000011)	ND(0.01)	ND(0.01)	ND(0.02)	0.00002 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-22S	06/24/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-22S Dup	06/24/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.002)	0.000011 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-22S	09/22/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-22S	10/26/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	0.000011 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-22D	01/27/10	ND(0.02)	ND(0.02)	ND(0.2)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001) UJ	0.012 J [1]	0.015 J	ND(0.01)	ND(0.02)	0.014 J [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-22D	06/24/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00034	ND(0.001)	ND(0.001)	ND(0.002)	0.00029	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-22D	09/22/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00002 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000028 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-22D	10/26/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000047 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000072 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-22D	06/09/11	ND(0.002) UJ	ND(0.002)	ND(0.011)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.0000097) UJ	0.00004 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.00011	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.002)	--	ND(0.001) UJ
P2RI-22D	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	0.000028 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000083	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-23S	01/27/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.004)	--	--
P2RI-23S	06/23/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.002)	0.00001 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-23S	09/22/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-23S	10/27/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000097)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-23D	11/11/10	ND(0.002)	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.000011)	ND(0.000011)	ND(0.0009)	ND(0.0009)	ND(0.002)	0.000015 JB	ND(0.009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-23D	03/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-23D	06/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099) UJ	ND(0.0000099) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-23D	09/16/11	ND(0.002)	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.0000096)	ND(0.0000096)	ND(0.00009)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-24S [a]	10/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00011	ND(0.001)	ND(0.001)	ND(0.002)	0.00012	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.02)	--	ND(0.001)
P2RI-24D	03/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	0.000015 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000028)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-24D	06/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099) UJ	0.000032 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.00003 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-24D	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25S	01/27/10	ND(0.02)	ND(0.02)	ND(0.2)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.000015 J	0.000018 J	ND(0.01)	ND(0.01)	ND(0.02)	0.000038 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-25S	06/24/10	ND(0.002)	ND(0.002)	ND(0.009) UJ	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0009)	ND(0.0009)	ND(0.002)	0.000022 J	ND(0.009) UJ	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-25S	09/22/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	0.000017 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000016 JB	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25S	10/28/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	0.000022 J	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25D	11/11/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000059 JB	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25D Dup	11/11/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	0.000042 JB	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25D	03/16/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	0.000024 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000029 J	ND(0.01) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25D Dup	03/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	0.000018 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	0.008 J	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25D	06/11/11	ND(0.002)	ND(0.002)	ND(0.01) R	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001) R	ND(0.002) R	0.000031 JB	ND(0.01) R	ND(0.001)	ND(0.001) R	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-25D	09/19/11	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.0005)	0.001 J	0.000051 JB	ND(0.011) UJ	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26S	10/22/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.00001)	0.00003 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000045 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-26S Dup	10/22/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.000011)	0.000038 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000066 JB	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-26S	03/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011) UJ	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000033)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26S	06/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26S	09/20/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26D	11/12/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001) R	ND(0.002) R	0.00034 J	ND(0.01) UJ	ND(0.001)	ND(0.001) R	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26D	03/16/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	0.00022 J	ND(0.001)	0.002 J	ND(0.002) UJ	0.00022 J	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26D Dup	03/16/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095) UJ	0.00019 J	ND(0.001)	0.002 J	0.005 J	0.00024 J	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26D	06/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	0.00041 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-26D	09/20/11	ND(0.002)	ND(0.002)	ND(0.009) R	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.00001)	ND(0.00001)	ND(0.00009)	ND(0.0005)	0.004	0.00039	ND(0.009) R	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-27DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-27DF [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Tetramethyl Lead (TML)[1] (mg/L)	Quinoline[1] (mg/L)
P2RI-27S	03/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	--	--	ND(0.001)	ND(0.001)	ND(0.002)	--	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	--	--	ND(0.001) UJ
P2RI-27S	06/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-27S	09/14/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.005) UJ	ND(0.005)	ND(0.000033)	ND(0.1)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-27S	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-27D	06/28/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001)	0.00054	ND(0.01)	ND(0.01)	ND(0.02)	0.00049 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-27D	09/14/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.0001)	0.00017 J	0.002 J	ND(0.005) UJ	ND(0.005)	ND(0.001) [1]	ND(0.1)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-27D	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.00012	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000091 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-27D	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.00008	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00011	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-28S	12/09/11	ND(0.003)	ND(0.003)	ND(0.015)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001) [1]	ND(0.0001) [1]	ND(0.0001)	ND(0.0007)	ND(0.0007)	0.0001 JB [1]	ND(0.015)	ND(0.0001)	ND(0.0007)	ND(0.0001)	ND(0.003)	--	--	ND(0.001)
P2RI-28S	03/21/12	ND(0.003)	ND(0.003)	ND(0.015)	ND(0.002)	ND(0.0002)	ND(0.0002)	ND(0.002)	--	--	ND(0.0002)	ND(0.0008)	ND(0.0008)	--	ND(0.015)	ND(0.0002)	ND(0.0008)	ND(0.0002)	ND(0.003)	--	--	ND(0.002)
P2RI-28S	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000036)	ND(0.000036)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00011)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	--	ND(0.001)
P2RI-29S	12/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-29S	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-29S	05/18/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	0.000012 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000076	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-30S	12/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-30S	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000098)	0.00012	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.0003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-30S	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000093)	ND(0.000093)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00028)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-31S	12/10/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00005 JB	ND(0.01) UJ	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-31S	03/22/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.000021	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-31S	05/21/12	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	0.000014 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01) UJ	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-32S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-32S	03/21/12	ND(0.023)	ND(0.023)	ND(0.11)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.011)	--	--	ND(0.001)	ND(0.006)	ND(0.006)	--	ND(0.11)	ND(0.001)	ND(0.006)	0.002	ND(0.023)	--	--	ND(0.011)
P2RI-32S	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	0.000033 J	0.00011	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00016 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	0.0005	ND(0.002)	--	--	ND(0.001)
P2RI-33S	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33S	09/16/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33S	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000034)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33S	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000067	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	--	ND(0.001)
P2RI-33D	11/04/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.000017 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000011 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33D	03/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33D Dup	03/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	0.000015 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33D	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33D Dup	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33D	09/16/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-33D Dup	09/16/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-34S [a]	06/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.000021 J	0.0013	0.001 J	ND(0.001)	ND(0.002)	0.001	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-34D	03/11/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.000011)	0.000023 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000045 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002) UJ	ND(0.001) UJ
P2RI-34D	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000012 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000047 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-34D	09/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000037 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-35S	11/03/10	ND(0.02) UJ	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0000098)	0.00018	ND(0.01)	ND(0.01)	ND(0.02)	0.00016 JB	ND(0.1)	ND(0.01)	ND(0.01) UJ	ND(0.01)	ND(0.02) UJ	ND(0.002)	--	ND(0.01)
P2RI-35S	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-35S Dup	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-35S	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000033 J	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-35S	12/07/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000065 JB	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-35D [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-35D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00009	ND(0.001)	ND(0.001)	ND(0.002)	0.000067	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-36S	03/14/11	ND(0.002)	ND(0.002) UJ	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.00003)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
P2RI-36S	06/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-36S	09/15/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	0.000065	0.0001 J	ND(0.0005)	ND(0.0005)	0.000052	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-36DF [a]	03/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	06/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-36DF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	ND(0.002) UJ	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.000015 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000018 JB	ND(0.011) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002) UJ	ND(0.002)	--	ND(0.001)
P2RI-37S	03/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37S	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37S	09/16/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0006)	ND(0.0006)	ND(0.00003)	ND(0.011)	ND(0.0001)	ND(0.0006)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37D	06/27/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37D	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37D	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000033)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37D Dup	12/07/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000033)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37D	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-37D Dup	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	0.00001	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000051	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-38S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-38S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	09/13/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-39S [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	ND(0.002) UJ	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.0000095)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
P2RI-40S	03/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-40S	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000014 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
P2RI-40S	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-41S [a]	11/15/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	03/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-41D	11/05/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000014 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000016 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-41D	03/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000044 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000042 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-41D	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000055	ND(0.001)	ND(0.001)	ND(0.002)	0.000047 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-41D	09/17/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.000018 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-43S	11/03/10	ND(0.02) UJ	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	0.018 J	ND(0.0001)	0.0049	ND(0.01)	0.025 J	ND(0.02)	0.014 J [1]	ND(0.1)	ND(0.01)	0.11 J	ND(0.01)	ND(0.02) UJ	ND(0.002)	--	ND(0.01)
P2RI-43S	03/16/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.00005) UJ	0.0062 J	0.016 J	ND(0.01)	ND(0.02)	0.04 J [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.01)	--	ND(0.01)
P2RI-43S	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.005 J [1]	ND(0.001)	0.016	0.006	0.006 [1]	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-43S	09/19/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.007 [1]	0.007	ND(0.0005)	ND(0.0005)	0.04 [1]	ND(0.01)	ND(0.0001)	0.002	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-43D	03/30/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
P2RI-43D	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	0.000022 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000059 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-43D	09/19/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-43D	12/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44S [a]	11/05/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-44S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Tetramethyl Lead (TML)[1] (mg/L)	Quinoline[1] (mg/L)
P2RI-44SR	06/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44SR Dup	06/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44SR	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44SR Dup	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44SR	12/06/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000037 J	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44SR	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.000021	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44SR Dup	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44D	03/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000047 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000052	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-44D	06/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-44D	09/16/11	ND(0.002)	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.0000097)	0.000027 J	ND(0.00009)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-44D	12/06/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	0.0001 J	ND(0.001)	ND(0.0000095)	0.00032	0.0007	ND(0.0005)	ND(0.0005)	0.00025	ND(0.01)	0.0002 J	ND(0.0005)	0.0002 J	ND(0.002)	ND(0.02)	--	ND(0.001)
P2RI-45S	11/03/10	ND(0.002) UJ	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0001)	0.0015	ND(0.001)	ND(0.001)	ND(0.002)	0.001 J [1]	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002) UJ	ND(0.002)	--	ND(0.001)
P2RI-45S	03/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	0.0065 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.019 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-45S Dup	03/16/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	0.007 [1]	0.013 J	0.001 J	0.003 J	0.032 [1]	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-45S	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	0.003 J [1]	0.006	ND(0.001)	ND(0.002)	0.011 [1]	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-45S	09/19/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	--	ND(0.0001)	ND(0.0005)	ND(0.0005)	--	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-45D	06/28/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0001)	0.0028	ND(0.001)	ND(0.001)	ND(0.002)	0.0023	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.02)	--	ND(0.001)
P2RI-45D	09/19/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.00007	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000072 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-45D	12/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.000037 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000045 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-45D	03/22/12	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000033)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-46S	11/03/10	ND(0.002) UJ	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0001)	0.0081	0.002 J	0.006	ND(0.002)	0.007 [1]	ND(0.01)	ND(0.001)	0.004 J	ND(0.001)	0.005 J	ND(0.002)	--	ND(0.001)
P2RI-46S	03/15/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.000011)	0.017 J [1]	0.015 J	ND(0.01)	ND(0.02)	0.015 J [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.01)	--	ND(0.01)
P2RI-46S	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.0012	ND(0.001)	ND(0.001)	ND(0.002)	0.000098 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-46S	09/19/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	0.002	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00071 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-46D	12/16/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01) [1]	ND(0.01) [1]	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.01) [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	--	--	ND(0.01)
P2RI-46D [a]	03/15/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	06/11/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46D [a]	09/19/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-46DFL	12/16/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001)	0.0019	ND(0.01)	ND(0.01)	ND(0.02)	0.0015	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-46DFL	03/15/11	ND(0.01)	ND(0.01)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [1]	ND(0.005) [1]	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005) [1]	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	--	--	ND(0.005)
P2RI-46DFL	06/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) [1]	ND(0.001) [1]	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001) [1]	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	--	--	ND(0.001)
P2RI-46DFL	09/19/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001) UJ	ND(0.0001)	ND(0.0001)	ND(0.001) UJ	ND(0.0000098)	0.000034 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000047 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002) UJ	--	--	ND(0.001)
P2RI-46DFU	06/28/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	0.015 J	ND(0.01)	ND(0.01) [1]	0.092 [1]	0.13	ND(0.01)	ND(0.02)	0.11 [1]	ND(0.1)	0.023 J	ND(0.01)	0.013 J	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-46DFU	09/19/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	0.00032 J	0.019 J	0.002 J	ND(0.005)	ND(0.005)	0.002 J [1]	ND(0.1)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.02)	ND(0.002)	--	ND(0.01)
P2RI-46DFU	12/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	0.000098	ND(0.0001)	0.002	0.007	0.00019 JB	ND(0.01)	ND(0.0001)	0.004	ND(0.0001)	ND(0.002)	ND(0.02)	--	ND(0.001)
P2RI-46DFU	03/21/12	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	0.001	0.003	ND(0.01)	ND(0.00001)	0.015 [1]	0.021	ND(0.005)	ND(0.005)	0.014 [1]	ND(0.1)	0.004	ND(0.005)	0.003	ND(0.02)	--	--	ND(0.01)
P2RI-47S	11/05/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00011	ND(0.001)	ND(0.001)	ND(0.002)	0.000074	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-47S	03/17/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.00004 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000037 J	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-47S	06/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.002) UJ	--	ND(0.001)
P2RI-47S	09/20/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-47DF	03/17/11	ND(0.006)	ND(0.006)	ND(0.028)	ND(0.003)	ND(0.003)	ND(0.003)	ND(0.003)	ND(0.003) [1]	0.004 J [1]	0.005 J	ND(0.003)	ND(0.006)	0.004 J [1]	ND(0.028)	ND(0.003)	ND(0.003)	ND(0.003)	ND(0.006)	--	--	ND(0.003)
P2RI-47DF [a]	06/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	09/20/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-47DF [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-48S	11/04/10	ND(0.003) UJ	ND(0.003)	ND(0.016) UJ	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002) [1]	ND(0.002) [1]	ND(0.002)	ND(0.002)	ND(0.003)	ND(0.002) [1]	ND(0.016) UJ	ND(0.002)	ND(0.002) UJ	ND(0.002)	ND(0.003) UJ	--	--	ND(0.002)
P2RI-48S	03/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000033)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-48S	06/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-48S	09/17/11	ND(0.002)	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.0000096)	ND(0.0000096)	ND(0.00009)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
P2RI-49S	11/05/10	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099) UJ	ND(0.001)	ND(0.001)	ND(0.002)	0.000013 J	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-49S	12/09/10	ND(0.003) UJ	ND(0.003)	ND(0.014)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.003)	ND(0.000011)	ND(0.014)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.003)	ND(0.003)	--	ND(0.001) UJ
P2RI-49S	03/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000032)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
P2RI-49S	06/14/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-50S	12/09/10	ND(0.002) UJ	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000012 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000024 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
P2RI-50S	03/15/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000034)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-50S	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.000011 J	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-50S	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-50S	05/21/12	ND(0.002) R	ND(0.002) R	ND(0.01)	ND(0.001) R	ND(0.0001) R	ND(0.0001) R	ND(0.001) R	ND(0.0000095)	ND(0.0000095)	0.0002 J	ND(0.0005)	ND(0.0005)	0.000034 J	ND(0.01)	ND(0.0001) R	ND(0.0005)	ND(0.0001) R	ND(0.002) R	ND(0.002) R	--	ND(0.001) R
P2RI-51S	12/16/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001)	ND(0.0001)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.0001)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-51S [a]	03/10/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-51S	06/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-51S	09/12/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-51S	12/03/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000035 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-51S	03/17/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	--	ND(0.0001)	ND(0.0005)	ND(0.0005)	--	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-51S	05/17/12	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00006 JB	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-52S [a]	06/28/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	09/14/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	12/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52S [a]	03/21/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-52DF	06/28/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001)	0.027 J [1]	0.03 J	ND(0.01)	ND(0.02)	0.028 J [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
P2RI-52DF	09/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	0.0002 J	0.0004 J	ND(0.001)	ND(0.0000095)	0.00044	0.003	ND(0.0005)	ND(0.0005)	0.002 [1]	ND(0.01)	0.0006	ND(0.0005)	0.0004 J	ND(0.002)	--	--	ND(0.001)
P2RI-52DF	12/08/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	0.001 J	ND(0.01)	ND(0.001) [1]	0.005 J [1]	0.005 J	ND(0.005)	ND(0.005)	0.005 J [1]	ND(0.1)	0.002 J	ND(0.005)	0.001 J	ND(0.02)	--	--	ND(0.01)
P2RI-52DF	03/21/12	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	--	0.003 [1]	0.003	ND(0.005)	ND(0.005)	0.003 [1]	ND(0.1)	0.001	ND(0.005)	ND(0.001)	ND(0.02)	--	--	ND(0.01)
P2RI-53S	06/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000096)	ND(0.000096)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-53S	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-53S Dup	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.0003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-53S	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000095)	ND(0.000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-53S Dup	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000095)	ND(0.000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-53S	03/22/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000077	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SU	06/15/11	ND(0.002)	ND(0.002)	ND(0.01) R	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01) R	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SU	09/16/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SU	12/08/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.004 [1]	ND(0.01) UJ	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SU	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000042	ND(0.01)	ND(0.0001)	0.0006	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SM	06/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SM	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SM	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000065	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SM	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) UJ	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SM Dup	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000067 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SL	06/27/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SL	09/16/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SL	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000051	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-54SL	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) R	ND(0.00001) R	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) R	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-55S	12/07/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	0.00006	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000048 JB	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	--	ND(0.001)
P2RI-55S	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.000016	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-55S	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	0.000013 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) UJ	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-55DF [a]	11/30/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	12/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-55DF [a]	05/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Tetramethyl Lead (TML)[1] (mg/L)	Quinoline[1] (mg/L)
P2RI-56S [a]	12/09/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	03/15/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56S [a]	05/16/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.007 [1]	0.004	0.037	0.005	0.004 [1]	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-56DF	03/22/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	0.001	0.000051	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-56DF	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000091)	0.000022 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000027)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-57S	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-57S	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	--	ND(0.001)
P2RI-57S	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) UJ	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-58S	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.005 [1]	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-58S	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-58S	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000035 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-59S	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000086 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-59S	03/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-59S	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-59S Dup	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000028)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-60S	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000078 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-60S Dup	12/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.000014 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000038 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-60S	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-60S Dup	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000034)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-60S	05/21/12	ND(0.002) R	ND(0.002) R	ND(0.01)	ND(0.001) R	ND(0.0001) R	ND(0.0001) R	ND(0.001) R	ND(0.00001)	ND(0.00001)	ND(0.0001) R	0.0008 J	ND(0.0005)	0.000073	ND(0.01)	ND(0.0001) R	0.003	ND(0.0001) R	ND(0.002) R	ND(0.002) R	--	ND(0.001) R
P2RI-60S Dup	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	0.0006 J	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	0.003	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-61S	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000047 JB	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-61S	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-61S Dup	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-61S	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000094)	ND(0.0000094)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000028)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-62S	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-62S	03/22/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-62S	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-63S	12/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000033)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-63S	03/21/12	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
P2RI-63S	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) UJ	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-A	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00025	ND(0.001)	ND(0.001)	ND(0.002)	0.000077	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-A	06/27/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.00013 J	0.038 J [1]	0.05 J	ND(0.01)	ND(0.02)	0.052 [1]	ND(0.1)	0.01 J	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
GW-A	09/13/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	0.002 J	0.002 J	ND(0.01)	ND(0.0001) UJ	0.012 [1]	0.015	ND(0.005)	ND(0.005)	0.012 [1]	ND(0.1)	0.004 J	ND(0.005)	0.003 J	ND(0.02)	ND(0.02)	--	ND(0.01)
GW-A	12/06/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	0.0002 J	0.0003 J	ND(0.001)	0.000017 J	0.00046	0.001	ND(0.0005)	ND(0.0005)	0.001 [1]	ND(0.011)	0.0005 J	ND(0.0005)	0.0004 J	ND(0.002)	ND(0.02)	--	ND(0.001)
GW-C-24	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000024 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000054	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-C-24	06/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.000016 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00004 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-C-24	09/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005) UJ	ND(0.0005)	ND(0.000033)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-24	12/06/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000039 J	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-25	06/07/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	0.000063	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.000077	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-C-25	09/12/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.000037 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-25	12/05/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	0.000031 J	0.0002 J	ND(0.0005)	ND(0.0005)	0.000031 J	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-25	03/19/12	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) [1]	0.00002 [1]	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) [1]	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-29	10/21/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.00001)	0.00043	ND(0.001)	ND(0.001)	ND(0.002)	0.00015 JB	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
GW-C-29	03/14/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.0003	ND(0.001)	ND(0.001)	ND(0.002) UJ	0.002 J [1]	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-C-29	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	0.00005	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.00025 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-C-29	09/15/11	ND(0.002) UJ	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009) UJ	ND(0.0009)	ND(0.0000095)	0.0001 J	ND(0.00009) UJ	ND(0.0005)	ND(0.0005)	0.00038	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009) UJ
GW-C-29 Dup	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	0.000086	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00047	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-45	11/03/10	ND(0.002) UJ	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.00004 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000044 JB	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002) UJ	ND(0.002)	--	ND(0.001)
GW-C-45	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	0.000016 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-C-45	06/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099) UJ	0.000012 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-45	09/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005) UJ	ND(0.0005)	ND(0.000033)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-46S	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000023 J	ND(0.001)	ND(0.001)	ND(0.002)	0.00005 J	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-C-46S Dup	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000023 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000039 J	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-C-46S	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.022 J [1]	0.035 J	ND(0.001)	ND(0.002)	0.033 J [1]	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-C-46S	09/14/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005) UJ	ND(0.0005)	ND(0.000034)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-46S	12/06/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.000011 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000059	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-46DF	03/09/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.00074 J	0.027 J [1]	0.033 J	ND(0.01)	ND(0.02)	0.029 J [1]	ND(0.1)	ND(0.01)	ND(0.01) UJ	ND(0.01)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.01)
GW-C-46DF	09/13/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001) [1]	0.003 J [1]	0.004 J	ND(0.005)	ND(0.005)	0.002 J [1]	ND(0.1)	0.001 J	ND(0.005)	0.001 J	ND(0.02)	--	--	ND(0.01)
GW-C-46DF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-46DF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47S	11/03/10	ND(0.002) UJ	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	0.055 [1]	0.048	0.01	ND(0.002)	0.023 [1]	ND(0.01) UJ	ND(0.001)	0.028 J	ND(0.001)	ND(0.002) UJ	ND(0.002)	--	ND(0.001)
GW-C-47S	03/14/11	ND(0.02)	ND(0.02) UJ	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.00019)	0.17 [1]	0.29	ND(0.01)	ND(0.02) UJ	0.11 J	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	--	ND(0.01) UJ
GW-C-47S	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.016	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.029 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
GW-C-47S	12/06/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	0.005 [1]	0.007	0.001	0.003	0.009 [1]	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.02)	--	ND(0.001)
GW-C-47DF	03/12/11	ND(0.003)	ND(0.003) UJ	ND(0.014)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	--	0.003 J [1]	0.005 J	0.004 J	0.014	0.008 [1]	ND(0.014)	ND(0.001)	0.009	ND(0.001)	ND(0.003)	--	--	ND(0.001) UJ
GW-C-47DF [a]	12/06/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-C-47DF	03/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000016)	0.00042	0.0008	0.003	0.013	0.002 [1]	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	--	ND(0.001)
GW-C-47DF	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000019)	0.00038	0.001	0.003	0.01	0.001 1	ND(0.01)	ND(0.0001)	0.007	ND(0.0001)	ND(0.002)	--	--	ND(0.001)
GW-C-48	03/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	0.00029 J	ND(0.001)	0.002 J	ND(0.002)	0.00018 J	ND(0.01)	ND(0.001)	0.003 J	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
GW-C-48 Dup	03/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00013 J	ND(0.001)	0.001 J	ND(0.002)	0.0003 J	ND(0.01)	ND(0.001)	0.002 J	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001) UJ
GW-C-48	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00049 J	ND(0.001)	ND(0.001)	ND(0.002)	0.003 J [1]	ND(0.01)	ND(0.001)	0.003 J	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-48 Dup	06/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00026 J	ND(0.001)	ND(0.001)	ND(0.002)	0.004 J [1]	ND(0.01)	ND(0.001)	0.007	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-48	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	0.00019	0.0002 J	0.0008 J	ND(0.0005)	0.00087 J	ND(0.01)	ND(0.0001)	0.014	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-48	12/06/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000099)	0.00017	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.0016 J	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-C-48 Dup	12/06/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	0.00015	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.0011 J	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-CS	03/11/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	--	--	ND(0.001)	ND(0.001)	ND(0.002)	--	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.02)	ND(0.02)	ND(0.001) UJ
GW-CS	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.000018 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-CS	09/14/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000012)	ND(0.000012)	ND(0.0001)	ND(0.0005) UJ	ND(0.0005)	ND(0.000035)	ND(0.01) UJ	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-CS	12/06/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	0.000025 J	ND(0.0001)	ND(0.0006)	ND(0.0006)	ND(0.000034)	ND(0.011)	ND(0.0001)	ND(0.0006)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-CD [a]	12/05/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CD	03/19/12	ND(0.003)	ND(0.003)	ND(0.015)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0001) [1]	0.0004 [1]	0.0006	ND(0.0007)	ND(0.0007)	0.0004 [1]	ND(0.015)	0.0002	ND(0.0007)	0.0002	ND(0.003)	--	--	ND(0.001)
GW-CD [a]	05/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	06/08/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-CDF [a]	03/19/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	09/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	12/01/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-D [a]	03/20/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-ES	12/15/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	0.000044 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
GW-ES Dup	12/15/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.000013 J	0.000014 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000048 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
GW-ES	03/15/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000098)	0.000023 J	ND(0.001)	ND(0.001)	ND(0.002) UJ	0.0002 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-ES	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000017 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.00039 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	0.005 J	ND(0.002)	--	ND(0.001) UJ
GW-ES	09/15/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0006)	ND(0.0006)	0.0003 J	ND(0.011)	ND(0.0001)	ND(0.0006)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-ED	12/17/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.00024 J	0.033 J [1]	0.03 J	ND(0.01)	ND(0.02)	0.022 J [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	--	--	ND(0.01)
GW-ED	03/15/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01) [1]	0.014 J [1]	0.017 J	ND(0.01)	ND(0.02)	0.013 J [1]	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	--	--	ND(0.01)
GW-ED	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.00017	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.00014 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-ED	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)

TABLE 4.6-3. ANALYTICAL RESULTS, SVOCs, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Tetramethyl Lead (TML)[1] (mg/L)	Quinoline[1] (mg/L)
GW-FS	10/21/10	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.000011)	0.000012 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000015 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
GW-FS	03/08/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-FS	06/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	0.000031 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-FS	09/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000011)	ND(0.0000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.0000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-GS	10/22/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.002)	0.000012 JB	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
GW-GS	03/08/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-GS	06/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000028)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-GS	09/13/11	ND(0.002)	ND(0.002)	ND(0.01) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.0000031)	ND(0.01) UJ	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-H [a]	11/16/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-H	03/09/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	0.000024 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000034 J	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)
GW-H	06/27/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.0001)	0.00071	ND(0.01)	ND(0.01)	ND(0.02)	0.0011	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
GW-H	09/12/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	0.000011 J	0.00023	0.0001 J	ND(0.0005)	ND(0.0005)	0.001 [1]	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-K [a]	06/07/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-K	09/12/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	0.0001 J	ND(0.001)	ND(0.0001) [1]	0.0007 [1]	0.0007	0.001	ND(0.0005)	0.001 [1]	ND(0.01)	0.0002 J	ND(0.0005)	0.0002 J	ND(0.002)	--	--	ND(0.001)
GW-K	12/06/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001) [1]	ND(0.001) [1]	0.001 J	ND(0.005)	ND(0.005)	0.001 J [1]	ND(0.1)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.02)	--	--	ND(0.01)
GW-K	03/19/12	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	0.002	ND(0.01)	ND(0.001) [1]	0.006 [1]	0.008	ND(0.005)	ND(0.005)	0.006 [1]	ND(0.1)	0.002	ND(0.005)	0.003	ND(0.02)	--	--	ND(0.01)
GW-L	06/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	0.000038 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000044 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-L	09/13/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000097)	0.000024 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-L	12/06/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	0.000016 J	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.000038 J	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-L	03/19/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	0.000016	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-MS	10/21/10	ND(0.002)	ND(0.002)	ND(0.011) UJ	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.00001)	0.000065	ND(0.001)	ND(0.001)	ND(0.002)	0.000048 JB	ND(0.011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001) UJ
GW-MS	03/14/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-MS Dup	03/14/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.000029)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-MS	06/08/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	0.000039 J	ND(0.001) UJ	ND(0.001)	ND(0.002)	0.000086 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	0.005 J	ND(0.002)	--	ND(0.001) UJ
GW-MS	09/15/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000011)	ND(0.0000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-MDF [a]	03/12/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GW-MDF	06/08/11	ND(0.02) UJ	ND(0.02) UJ	ND(0.1) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ	ND(0.01) UJ [1]	0.098 J [1]	0.13 J	ND(0.01) UJ	ND(0.02) UJ	0.12 J [1]	ND(0.1) UJ	0.013 J	ND(0.01) UJ	ND(0.01) UJ	ND(0.02) UJ	ND(0.02) UJ	--	ND(0.01) UJ
GW-MDF	09/13/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	0.002 J	0.003 J	ND(0.01)	ND(0.001) [1]	0.019 [1]	0.022	ND(0.005)	ND(0.005)	0.018 [1]	ND(0.1)	0.004 J	ND(0.005)	0.004 J	ND(0.02)	--	--	ND(0.01)
GW-MDF	12/06/11	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001) [1]	0.002 J [1]	0.002 J	ND(0.005)	ND(0.005)	0.002 J [1]	ND(0.1)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.02)	--	--	ND(0.01)
GW-NS	12/17/10	ND(0.02)	ND(0.02)	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.000012)	0.000077	ND(0.01)	ND(0.01)	ND(0.02)	0.000068	ND(0.1)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.02)	--	ND(0.01)
GW-NS	03/15/11	ND(0.004)	ND(0.004)	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002) [1]	ND(0.002) [1]	ND(0.002)	ND(0.002)	ND(0.004)	ND(0.002) [1]	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.004)	ND(0.01)	--	ND(0.002)
GW-NS	06/07/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.000031)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-NS	09/14/11	ND(0.006)	ND(0.006)	ND(0.031)	ND(0.003)	ND(0.0003)	ND(0.0003)	ND(0.003)	ND(0.00001)	ND(0.00001)	ND(0.0003)	ND(0.002)	ND(0.002)	ND(0.00003)	ND(0.031)	ND(0.0003)	ND(0.002)	ND(0.0003)	ND(0.006)	--	--	ND(0.003)
GW-NS	12/05/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.02)	--	ND(0.001)
GW-NS	03/19/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-NS	05/20/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003) UJ	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-ND	12/15/10	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	--	ND(0.001)	ND(0.001)	ND(0.00001)	0.000018 J	ND(0.001)	ND(0.001)	ND(0.002)	0.000014 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	--	ND(0.001)
GW-ND	03/15/11	ND(0.002)	ND(0.002) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-ND	06/07/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.000046 J	0.00003 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	--	ND(0.001) UJ
GW-ND	09/14/11	ND(0.002)	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.000012)	ND(0.000012)	ND(0.00009)	ND(0.0005) UJ	ND(0.0005)	ND(0.000035)	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.00009)	ND(0.002)	ND(0.002)	--	ND(0.0009)
GW-ND	12/06/11	ND(0.002)	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000032)	ND(0.011)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-ND	03/19/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	0.00004	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
GW-ND	05/18/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.00003)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
PA-5R	12/10/11	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000011)	ND(0.0000011)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.0000032)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
PA-5R	03/22/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
PA-5R	05/21/12	ND(0.002)	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	ND(0.002)	--	ND(0.001)
Groundwater Standard or RBSL (mg/L):		270	2	0.069	0.00067	0.13	1.1	NA	0.0005	0.00097	0.027	0.72	1.4	0.1	0.06	NA	0.3	0.83	0.015	0.00000099	NA	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
[a] - Sample not collected due to insufficient water volume
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
P2RI-1S	01/27/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-1S	06/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-1S	09/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-1S	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-1D	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-1D	03/11/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-1D	06/08/11	ND(0.3) UJ	ND(0.05)	ND(0.02)	ND(0.02) UJ	ND(0.3) UJ	ND(0.4) UJ	ND(0.5) UJ	ND(0.05)
P2RI-1D	09/13/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-2	06/24/10	--	0.106 J	0.0766 J	0.0765 J	--	--	--	0.264 J
P2RI-2	09/23/10	--	0.229 J	0.193 J	0.0325 J	--	--	--	0.477 J
P2RI-2	10/28/10	--	ND(0.05) UJ	0.0337 J	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-2	03/15/11	--	ND(0.25)	0.131 J	ND(0.1)	--	--	--	ND(0.25)
P2RI-3S	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-3S	03/15/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-3S	06/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-3S	09/13/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-3D	02/18/10	--	ND(1)	ND(0.4)	ND(0.4)	--	--	--	ND(1)
P2RI-3D	09/20/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-3D	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-3D	03/15/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-4S	10/26/10	--	6.82 J	0.531 J	0.842 J	--	--	--	13.7 J
P2RI-4S	03/15/11	--	5.59 J	0.636 J	0.838 J	--	--	--	12.8 J
P2RI-4S	12/09/11	--	4.66 J	0.627 J	0.179 J	--	--	--	9.81 J
P2RI-4S	03/21/12	--	10.6	1.36	2.46	--	--	--	18.5
P2RI-4S	05/20/12	--	4.71 J	0.542 J	0.997 J	--	--	--	10.8 J
P2RI-4D	01/27/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-4D	06/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-4D	09/21/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-4D	10/26/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-5	01/29/10	0.063	ND(0.5)	ND(0.2)	ND(0.2)	0.063	ND(0.039)	ND(0.049)	0.741 J
P2RI-5	06/22/10	--	1.04 J	ND(0.02)	0.0364 J	--	--	--	1.42 J
P2RI-5	09/23/10	--	0.456	0.0244 J	ND(0.02)	--	--	--	0.579
P2RI-5	10/28/10	--	0.249	ND(0.02)	ND(0.02)	--	--	--	0.376
P2RI-5	03/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	0.503
P2RI-5	06/13/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	0.565
P2RI-5S	06/28/11	0.28	ND(0.5)	ND(0.2)	ND(0.2)	0.14	ND(0.069)	0.14	ND(0.5)
P2RI-5S	09/19/11	0.051	0.536 J	ND(0.1) UJ	ND(0.1) UJ	0.051 J	ND(0.04)	ND(0.05) UJ	0.567 J
P2RI-5S	12/09/11	0.77	1.15	0.394 J	ND(0.1)	0.62 J	0.047	0.1 J	1.88
P2RI-5S	03/21/12	1.4	1.81	0.502	0.336	1.2	0.12	0.1	2.83
P2RI-6	01/29/10	1.4	8.26 J	1.45 J	2.25 J	1.3	0.086	ND(0.05)	19.5 J
P2RI-6	06/23/10	4.6	13.2 J	1.32 J	3.38 J	4.2	0.31	ND(0.47)	27.8
P2RI-6	09/23/10	1	9.05 J	2 J	2.58 J	0.89	0.12	ND(0.052)	21.3 J
P2RI-6	10/28/10	2.6	9.75	1.57	1.68	2.4 J	0.22	ND(0.27) UJ	21.6
P2RI-7	03/10/11	--	0.192 J	0.0228 J	0.0259 J	--	--	--	0.331 J
P2RI-7	06/09/11	--	ND(0.25) UJ	ND(0.1) UJ	ND(0.1) UJ	--	--	--	ND(0.25) UJ
P2RI-7	09/19/11	--	ND(0.25) UJ	ND(0.1) UJ	ND(0.1) UJ	--	--	--	ND(0.25) UJ
P2RI-7	12/09/11	--	0.0813 J	ND(0.02)	ND(0.02) UJ	--	--	--	0.103 J
P2RI-7	03/21/12	--	0.278	ND(0.02)	0.0277	--	--	--	0.355
P2RI-8 [a]	09/20/11	--	--	--	--	--	--	--	--
P2RI-8 [a]	12/07/11	--	--	--	--	--	--	--	--
P2RI-8	03/19/12	--	0.281	0.0644	0.0695	--	--	--	0.436
P2RI-8	05/20/12	--	0.162 J	0.0579 J	0.0249 J	--	--	--	0.265 J
P2RI-9S	01/29/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-9S	06/23/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-9S	09/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-9S	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-9D	01/29/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-9D	06/23/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-9D	09/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-9D	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-10S	01/29/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-10S	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-10S	09/20/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-10S	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-10D [a]	10/25/10	--	--	--	--	--	--	--	--
P2RI-10D [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-10D [a]	09/17/11	--	--	--	--	--	--	--	--
P2RI-10D [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-11S	01/29/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-11S	06/23/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-11S	09/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-11S Dup	09/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-11S	10/27/10	0.58	ND(0.05)	ND(0.02)	ND(0.02)	0.58	ND(0.4)	ND(0.5)	ND(0.05)
P2RI-11S Dup	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
P2RI-11D [a]	10/27/10	--	--	--	--	--	--	--	--
P2RI-11D [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-11D [a]	09/14/11	--	--	--	--	--	--	--	--
P2RI-11D [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-12	06/23/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-12	09/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-12	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-12	03/30/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-13 [a]	10/25/10	--	--	--	--	--	--	--	--
P2RI-13 [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-13 [a]	09/13/11	--	--	--	--	--	--	--	--
P2RI-13 [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-14	01/28/10	0.19	ND(0.5)	ND(0.2)	ND(0.2)	0.093 J	ND(0.041)	0.094 J	ND(0.5)
P2RI-14	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-14	09/22/10	--	0.0657 J	0.0242 J	ND(0.02)	--	--	--	0.117 J
P2RI-14	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-15 [a]	10/25/10	--	--	--	--	--	--	--	--
P2RI-15 [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-15 [a]	09/13/11	--	--	--	--	--	--	--	--
P2RI-15 [a]	12/07/11	--	--	--	--	--	--	--	--
P2RI-16S	01/28/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-16S	06/24/10	--	0.087 J	ND(0.02)	ND(0.02)	--	--	--	0.087 J
P2RI-16S	09/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-16S	10/26/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-16D	03/10/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-16D Dup	03/10/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-16D	06/11/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-16D Dup	06/11/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-16D	09/17/11	--	ND(0.25) UJ	ND(0.1) UJ	ND(0.1) UJ	--	--	--	ND(0.25) UJ
P2RI-16D Dup	09/17/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-16D	12/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-16D Dup	12/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-17	01/28/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-17	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-17	09/20/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-17	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-18	01/28/10	ND(0.03)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.03)	ND(0.04)	0.22	ND(0.5)
P2RI-18	06/23/10	--	ND(0.05) R	ND(0.02) R	ND(0.02) R	--	--	--	ND(0.05)
P2RI-18 Dup	06/23/10	--	0.0807 J	ND(0.02)	ND(0.02)	--	--	--	0.0807 J
P2RI-18SR	11/05/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-18SR	03/30/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-18SR	06/10/11	--	28.8 J	ND(1)	ND(1)	--	--	--	28.8
P2RI-18SR	09/17/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-18D	11/04/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-18D Dup	11/04/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-18D	06/10/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-18D	09/17/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-18D	12/08/11	--	ND(0.05) UJ	ND(0.02)	ND(0.02) R	--	--	--	ND(0.05) UJ
P2RI-19S	01/28/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-19S	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-19S	09/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-19S	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-19D	11/16/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-19D	03/11/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-19D	06/09/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-19D	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-19D Dup	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-20	01/28/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-20 Dup	01/28/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-20	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-20	09/20/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-20 Dup	09/20/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-20	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-20 Dup	10/25/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-21S	11/05/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-21S	03/09/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-21S	06/09/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-21S	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-21D	10/27/10	ND(0.031)	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.031)	ND(0.041)	ND(0.051)	ND(0.05)
P2RI-21D	03/09/11	0.42	ND(0.05)	ND(0.02)	ND(0.02)	0.42	ND(0.4)	ND(0.5)	ND(0.05)
P2RI-21D	06/10/11	ND(0.3) UJ	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.3) UJ	ND(0.4) UJ	ND(0.5) UJ	ND(0.05)
P2RI-21D	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-22S	01/27/10	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-22S	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-22S Dup	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-22S	09/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-22S	10/26/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
P2RI-22D	01/27/10	ND(0.3)	ND(2.5)	ND(1)	ND(1)	ND(0.3) UJ	ND(0.4)	ND(0.5) UJ	ND(2.5)
P2RI-22D	06/24/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-22D	09/22/10	0.26 J	ND(0.05)	0.0348 J	ND(0.02)	ND(0.031) UJ	0.081	0.18 J	ND(0.05)
P2RI-22D	10/26/10	ND(0.031)	ND(0.05) UJ	0.0295 J	ND(0.02) UJ	ND(0.031)	ND(0.041)	ND(0.052)	ND(0.05)
P2RI-22D	06/09/11	ND(0.3) UJ	ND(2.5)	ND(1)	ND(1)	ND(0.3) UJ	ND(0.4) UJ	ND(0.5) UJ	ND(2.5)
P2RI-22D	09/15/11	ND(0.028)	ND(2.5)	ND(1)	ND(1)	ND(0.028) UJ	ND(0.038)	ND(0.047) UJ	ND(2.5)
P2RI-23S	01/27/10	ND(0.029)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.029)	ND(0.038)	0.072	ND(0.5)
P2RI-23S	06/23/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-23S	09/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-23S	10/27/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-23D	11/11/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-23D	03/15/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-23D	06/09/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-23D	09/16/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-24S [a]	10/25/10	--	--	--	--	--	--	--	--
P2RI-24S [a]	06/10/11	--	--	--	--	--	--	--	--
P2RI-24S [a]	09/14/11	--	--	--	--	--	--	--	--
P2RI-24S [a]	12/09/11	--	--	--	--	--	--	--	--
P2RI-24D	12/16/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-24D	03/10/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-24D	06/10/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-24D	09/16/11	--	ND(0.05)	0.0606 J	ND(0.02)	--	--	--	0.0753 J
P2RI-25S	01/27/10	ND(0.029)	0.521 J	ND(0.2)	ND(0.2)	ND(0.029) UJ	ND(0.039)	ND(0.049) UJ	0.681 J
P2RI-25S	06/24/10	--	0.537	ND(0.02)	0.0345 J	--	--	--	0.682
P2RI-25S	09/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-25S	10/28/10	ND(0.031)	0.514	ND(0.02)	ND(0.02)	ND(0.031)	ND(0.041)	ND(0.051)	0.664
P2RI-25D	11/11/10	ND(0.029)	0.379 J	ND(0.1)	ND(0.1)	ND(0.029)	ND(0.039)	ND(0.048)	0.622
P2RI-25D Dup	11/11/10	ND(0.032) UJ	0.374 J	ND(0.1)	ND(0.1)	ND(0.032) UJ	ND(0.042)	ND(0.053) UJ	0.627
P2RI-25D	03/16/11	ND(0.028) UJ	0.527 J	ND(0.02)	0.0358 J	ND(0.028) UJ	ND(0.038) UJ	ND(0.047)	0.767 J
P2RI-25D Dup	03/16/11	ND(0.031) UJ	0.544 J	ND(0.02)	0.0308 J	ND(0.031) UJ	ND(0.042) UJ	ND(0.052)	0.789 J
P2RI-25D	06/11/11	ND(0.029) UJ	0.307 J	ND(0.1)	ND(0.1) UJ	ND(0.029) UJ	ND(0.038) UJ	ND(0.048) UJ	0.583 J
P2RI-25D	09/19/11	ND(0.028)	0.333 J	ND(0.1)	ND(0.1)	ND(0.028)	ND(0.038)	ND(0.047)	0.513
P2RI-26S	10/22/10	--	0.0907 J	ND(0.02)	ND(0.02)	--	--	--	0.0968 J
P2RI-26S Dup	10/22/10	--	0.0915 J	ND(0.02)	ND(0.02)	--	--	--	0.101 J
P2RI-26S	03/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-26S	06/14/11	--	ND(0.25) UJ	ND(0.1) UJ	ND(0.1) UJ	--	--	--	ND(0.25) UJ
P2RI-26S	09/20/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-26D	11/12/10	ND(0.03)	2.26	ND(0.1)	ND(0.1)	ND(0.03)	ND(0.04)	ND(0.05)	4.08
P2RI-26D	03/16/11	ND(0.032) UJ	2.21 J	ND(0.1)	0.121 J	ND(0.032) UJ	ND(0.043) UJ	ND(0.053)	3.94 J
P2RI-26D Dup	03/16/11	ND(0.029) UJ	2.15 J	ND(0.1)	0.126 J	ND(0.029) UJ	ND(0.038) UJ	ND(0.048)	3.89 J
P2RI-26D	06/14/11	ND(0.029)	1.67 J	ND(0.1) UJ	ND(0.1) UJ	ND(0.029)	ND(0.039)	ND(0.049)	3.56 J
P2RI-26D	09/20/11	ND(0.028)	2.17	ND(0.1)	ND(0.1)	ND(0.028) UJ	ND(0.038)	ND(0.047) UJ	4.1
P2RI-27S	03/10/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-27S	06/14/11	--	1.67 J	ND(0.2) UJ	ND(0.2) UJ	--	--	--	1.67 J
P2RI-27S	09/14/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-27S	12/07/11	--	ND(0.25)	0.898	ND(0.1)	--	--	--	0.916
P2RI-27D	06/28/11	0.59	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.3)	ND(0.4)	0.59	ND(0.05)
P2RI-27D	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-27D	12/07/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-27D	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-27DF [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-27DF [a]	09/14/11	--	--	--	--	--	--	--	--
P2RI-27DF [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-27DF [a]	03/20/12	--	--	--	--	--	--	--	--
P2RI-28S	12/09/11	--	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-28S	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-28S	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-29S	12/09/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-29S	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-29S	05/18/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-30S	12/09/11	ND(0.031)	ND(0.05)	ND(0.02)	ND(0.02) UJ	ND(0.031)	ND(0.041)	ND(0.051)	ND(0.05)
P2RI-30S	03/21/12	0.044	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.03)	0.044	ND(0.05)	ND(0.05)
P2RI-30S	05/21/12	ND(0.031)	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.031)	ND(0.041)	ND(0.051)	ND(0.05)
P2RI-31S	12/10/11	ND(0.032)	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	ND(0.032)	ND(0.043)	ND(0.053)	ND(0.05) UJ
P2RI-31S	03/22/12	ND(0.032)	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.032)	ND(0.043)	ND(0.054)	ND(0.25)
P2RI-31S	05/21/12	ND(0.03)	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.03)	ND(0.04)	ND(0.05)	ND(0.05)
P2RI-32S	12/09/11	--	ND(0.05) UJ	0.0944 J	ND(0.02) UJ	--	--	--	0.0726 J
P2RI-32S	03/21/12	--	ND(0.05)	0.0373	0.0414	--	--	--	0.0787
P2RI-32S	05/20/12	--	ND(0.05)	0.0422 J	ND(0.02)	--	--	--	ND(0.05)
P2RI-33S	06/13/11	--	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-33S	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-33S	12/07/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-33S	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
P2RI-33D	11/04/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-33D	03/17/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-33D Dup	03/17/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-33D	06/13/11	--	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-33D Dup	06/13/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-33D	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-33D Dup	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-34S [a]	06/10/11	--	--	--	--	--	--	--	--
P2RI-34S [a]	09/14/11	--	--	--	--	--	--	--	--
P2RI-34S [a]	12/09/11	--	--	--	--	--	--	--	--
P2RI-34S [a]	03/21/12	--	--	--	--	--	--	--	--
P2RI-34D	11/04/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-34D	03/11/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-34D	06/11/11	--	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-34D	09/17/11	--	ND(0.05)	ND(0.02)	0.0246 J	--	--	--	ND(0.05)
P2RI-35S	11/03/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-35S	06/13/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-35S Dup	06/13/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-35S	09/15/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-35S	12/07/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-35D [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-35D [a]	09/13/11	--	--	--	--	--	--	--	--
P2RI-35D [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-35D [a]	03/20/12	--	--	--	--	--	--	--	--
P2RI-36S	11/05/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-36S	03/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-36S	06/09/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-36S	09/15/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-36DF [a]	03/14/11	--	--	--	--	--	--	--	--
P2RI-36DF [a]	06/09/11	--	--	--	--	--	--	--	--
P2RI-36DF [a]	09/13/11	--	--	--	--	--	--	--	--
P2RI-36DF [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-37S	11/03/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37S	03/17/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37S	06/13/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37S	09/16/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-37D	06/27/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37D	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37D	12/07/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-37D Dup	12/07/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37D	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-37D Dup	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-38S [a]	06/08/11	--	--	--	--	--	--	--	--
P2RI-38S [a]	09/13/11	--	--	--	--	--	--	--	--
P2RI-38S [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-38S [a]	03/20/12	--	--	--	--	--	--	--	--
P2RI-39S [a]	06/08/11	--	--	--	--	--	--	--	--
P2RI-39S [a]	09/13/11	--	--	--	--	--	--	--	--
P2RI-39S [a]	12/01/11	--	--	--	--	--	--	--	--
P2RI-39S [a]	03/20/12	--	--	--	--	--	--	--	--
P2RI-40S	12/09/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-40S	03/10/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-40S	06/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-40S	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-41S	11/15/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-41S	03/11/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-41S [a]	06/11/11	--	--	--	--	--	--	--	--
P2RI-41S [a]	09/14/11	--	--	--	--	--	--	--	--
P2RI-41S [a]	12/09/11	--	--	--	--	--	--	--	--
P2RI-41D	11/05/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-41D	03/11/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-41D	06/11/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-41D	09/17/11	--	ND(0.05)	0.0231 J	ND(0.02)	--	--	--	ND(0.05)
P2RI-43S	11/03/10	0.86 J	1.41 J	0.892 J	0.479 J	0.73 J	0.13	ND(0.052)	4.9 J
P2RI-43S	03/16/11	1.9 J	3.81 J	1.33 J	1.66 J	1.9 J	ND(0.4) UJ	ND(0.5) UJ	11.9 J
P2RI-43S	06/11/11	0.6	0.958	1.48	ND(0.1) UJ	0.48	0.12	ND(0.049)	6.48
P2RI-43S	09/19/11	0.38	2.45 J	ND(0.1) UJ	3.45 J	0.29	0.098	ND(0.051)	9.75 J
P2RI-43D	03/30/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-43D	06/11/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-43D	09/19/11	--	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-43D	12/09/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-44S [a]	11/05/10	--	--	--	--	--	--	--	--
P2RI-44S [a]	03/10/11	--	--	--	--	--	--	--	--

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
P2RI-44SR	06/10/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-44SR Dup	06/10/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-44SR	09/16/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-44SR Dup	09/16/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-44SR	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-44SR	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-44SR Dup	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-44D	03/10/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-44D	06/10/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-44D	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-44D	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-45S	11/03/10	0.14 J	0.698 J	0.137 J	0.115 J	0.14 J	ND(0.038)	ND(0.048) UJ	1.09 J
P2RI-45S	03/16/11	0.16 J	3.98 J	0.788 J	0.33 J	0.16 J	ND(0.044) UJ	ND(0.055) UJ	5.94 J
P2RI-45S Dup	03/16/11	1.2 J	8.73 J	1.55 J	0.848 J	1 J	0.14 J	0.081 J	13.6 J
P2RI-45S	06/11/11	0.39 J	2.39 J	0.938 J	ND(0.1) UJ	0.35 J	0.048 J	ND(0.048) UJ	3.82 J
P2RI-45S	09/19/11	0.19	0.952	0.277 J	ND(0.1)	0.19	ND(0.039)	ND(0.049)	1.48
P2RI-45D	06/28/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-45D	09/19/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-45D	12/09/11	--	ND(0.05) UJ	ND(0.02)	0.0252 J	--	--	--	ND(0.05) UJ
P2RI-45D	03/22/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-46S	11/03/10	0.71 J	2.28 J	1.24 J	0.405 J	0.6 J	0.11	ND(0.05)	4.84 J
P2RI-46S	03/15/11	5.7	0.533	0.3 J	ND(0.1)	5.7	ND(0.4)	ND(0.5)	1.17
P2RI-46S	06/11/11	0.29 J	ND(0.5)	0.276 J	ND(0.2)	0.18 J	0.11 J	ND(0.051) UJ	ND(0.5)
P2RI-46S	09/19/11	0.17	ND(0.5) UJ	0.256 J	ND(0.2) UJ	0.11	0.065	ND(0.048)	ND(0.5) UJ
P2RI-46D	12/16/10	--	2.14 J	0.203 J	0.137 J	--	--	--	2.91 J
P2RI-46D	03/15/11	--	2.38 J	0.207 J	0.25 J	--	--	--	2.99 J
P2RI-46D	06/11/11	--	1.31	0.215 J	ND(0.2) UJ	--	--	--	1.82 J
P2RI-46D	09/19/11	--	0.969	0.12 J	ND(0.1)	--	--	--	1.29
P2RI-46DFL	12/16/10	2.1 J	ND(0.05)	ND(0.02)	0.0246 J	0.7 J	ND(0.4) UJ	1.4 J	ND(0.05)
P2RI-46DFL	03/15/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-46DFL	06/13/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-46DFL	09/19/11	--	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-46DFU	06/28/11	8.8	0.326 J	0.0269 J	ND(0.02)	7.1	0.86	0.87	0.423 J
P2RI-46DFU	09/19/11	2.2	0.215	0.0284 J	0.0269 J	2.2 J	ND(0.4)	ND(0.5) UJ	0.302
P2RI-46DFU	12/09/11	0.35	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	0.35 J	ND(0.2)	ND(0.25) R	ND(0.05) UJ
P2RI-46DFU	03/21/12	--	0.181	ND(0.02)	0.0409	--	--	--	0.229
P2RI-47S	11/05/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-47S	03/17/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-47S	06/14/11	--	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-47S	09/20/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-47DF	03/17/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-47DF	06/14/11	--	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	--	--	--	ND(0.05) UJ
P2RI-47DF [a]	09/20/11	--	--	--	--	--	--	--	--
P2RI-47DF [a]	12/09/11	--	--	--	--	--	--	--	--
P2RI-47DF [a]	03/21/12	--	--	--	--	--	--	--	--
P2RI-48S	11/03/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-48S	03/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-48S	06/14/11	--	ND(0.25) UJ	ND(0.1) UJ	ND(0.1) UJ	--	--	--	ND(0.25) UJ
P2RI-48S	09/17/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-49S	11/05/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-49S	12/09/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-49S	03/11/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
P2RI-49S	06/14/11	--	ND(0.5) UJ	ND(0.2) UJ	ND(0.2) UJ	--	--	--	ND(0.5) UJ
P2RI-50S	12/09/10	--	0.0566 J	ND(0.02)	0.0242 J	--	--	--	0.0808 J
P2RI-50S	03/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-50S	06/11/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-50S	09/16/11	ND(0.029)	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.029) UJ	ND(0.038)	ND(0.048) UJ	ND(0.25)
P2RI-50S	05/21/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-51S	12/16/10	--	ND(0.05)	ND(0.02)	0.0285	--	--	--	ND(0.05)
P2RI-51S	03/10/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-51S	06/09/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-51S	09/12/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-51S	12/03/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-51S	03/17/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-51S	05/17/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-52DF	06/28/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-52DF	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-52DF	12/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-52DF	03/21/12	--	0.0506	ND(0.02)	ND(0.02)	--	--	--	0.0541
P2RI-52S	06/28/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-52S	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-52S	12/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-52S	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
P2RI-53S	06/15/11	0.56	1.78 J	2.42 J	ND(0.2) UJ	0.055	0.5	ND(0.05)	4.37
P2RI-53S	09/16/11	0.23	1.43	0.952 J	0.732 J	0.034 J	0.2 J	ND(0.051) UJ	3.55
P2RI-53S Dup	09/16/11	0.31	1.46	0.963 J	0.504 J	0.032 J	0.28 J	ND(0.05) UJ	3.32
P2RI-53S	12/08/11	0.53 J	1.88	1.53 J	0.332 J	0.061 J	0.53 J	ND(0.052)	4.36
P2RI-53S Dup	12/08/11	0.92 J	1.6	1.39 J	0.199 J	0.091 J	0.83 J	ND(0.052)	3.81
P2RI-53S	03/22/12	0.27	1.76	1.18	1.11	0.057	0.22	ND(0.052)	4.54
P2RI-54SU	06/15/11	--	ND(0.25)	ND(0.1) UJ	ND(0.1)	--	--	--	ND(0.25)
P2RI-54SU	09/16/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-54SU	12/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-54SU	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SM	06/15/11	--	ND(0.05)	ND(0.02) UJ	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SM	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SM	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SM	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SM Dup	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SL	06/27/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SL	09/16/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SL	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-54SL	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-55DF [a]	11/30/11	--	--	--	--	--	--	--	--
P2RI-55DF [a]	12/07/11	--	--	--	--	--	--	--	--
P2RI-55DF [a]	03/15/12	--	--	--	--	--	--	--	--
P2RI-55DF [a]	05/15/12	--	--	--	--	--	--	--	--
P2RI-55S	12/07/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-55S	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-55S	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-56S [a]	12/09/11	--	--	--	--	--	--	--	--
P2RI-56S [a]	03/15/12	--	--	--	--	--	--	--	--
P2RI-56S [a]	05/16/12	--	--	--	--	--	--	--	--
P2RI-56DF	12/09/11	0.61	4.2 J	0.968 J	ND(0.1) UJ	0.51	0.1	ND(0.051)	5.96 J
P2RI-56DF	03/22/12	0.11	2.07	0.277	0.139	0.11	ND(0.041)	ND(0.051)	2.54
P2RI-56DF	05/21/12	--	1.41 J	0.0521 J	0.0333 J	--	--	--	1.56 J
P2RI-57S	12/07/11	--	ND(0.05)	ND(0.02)	0.0224 J	--	--	--	ND(0.05)
P2RI-57S	03/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-57S	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-58S	12/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-58S	03/20/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-58S	05/20/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-59S	12/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
P2RI-59S	03/20/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-59S	05/21/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-59S Dup	05/21/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-60S	12/07/11	--	ND(0.05)	ND(0.02)	0.0364 J	--	--	--	ND(0.05)
P2RI-60S Dup	12/07/11	--	ND(0.05)	ND(0.02)	0.0259 J	--	--	--	ND(0.05)
P2RI-60S	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-60S Dup	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-60S	05/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	0.0897 J
P2RI-60S Dup	05/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	0.0591 J
P2RI-61S	12/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-61S	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-61S Dup	03/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-61S	05/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-62S	12/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
P2RI-62S	03/22/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-62S	05/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
P2RI-63S	12/08/11	--	ND(0.5)	ND(0.2)	ND(0.2) UJ	--	--	--	ND(0.5)
P2RI-63S	03/21/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
P2RI-63S	05/20/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-A	03/09/11	0.054	0.176 J	0.023 JB	ND(0.02) UJ	ND(0.03)	ND(0.04)	0.054	0.247
GW-A	06/27/11	0.99 J	ND(0.05)	ND(0.02)	ND(0.02)	0.99 J	ND(0.4) UJ	ND(0.5) UJ	0.052 J
GW-A	09/13/11	0.35 J	ND(0.05)	ND(0.02)	ND(0.02)	0.35 J	ND(0.4)	ND(0.5) UJ	ND(0.05)
GW-A	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
GW-C-24	03/09/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-24	06/07/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-C-24	09/14/11	--	ND(0.05) R	ND(0.02) R	ND(0.02) R	--	--	--	ND(0.05) R
GW-C-24	12/06/11	--	ND(0.05)	ND(0.02)	0.0449 J	--	--	--	ND(0.05)
GW-C-25	06/07/11	--	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
GW-C-25	09/12/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-C-25	12/05/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-25	03/19/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-29	10/21/10	--	0.477 J	0.135 J	0.0565 J	--	--	--	0.722 J
GW-C-29	03/14/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-C-29	06/08/11	ND(0.029) UJ	ND(0.25)	ND(0.1)	ND(0.1) UJ	ND(0.029) UJ	ND(0.038) UJ	ND(0.048) UJ	ND(0.25)
GW-C-29	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-C-29 Dup	09/15/11	--	0.0522 J	ND(0.02)	ND(0.02)	--	--	--	0.0605 J

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
GW-C-45	11/03/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-45	03/09/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-45	06/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
GW-C-45	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-46S	03/09/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-46S Dup	03/09/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-46S	06/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
GW-C-46S	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-46S	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
GW-C-46DF	03/09/11	0.32	ND(0.05)	ND(0.02)	ND(0.02)	0.32 J	ND(0.4)	ND(0.5) UJ	ND(0.05)
GW-C-46DF	09/13/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-C-46DF	12/06/11	--	ND(0.05)	0.0258 J	ND(0.02)	--	--	--	ND(0.05)
GW-C-46DF	03/19/12	--	0.0597	ND(0.02)	ND(0.02)	--	--	--	0.0625
GW-C-47S	11/03/10	13 J	7.25 J	1.67 J	0.836 J	12 J	1.2	ND(0.96)	12.2 J
GW-C-47S	03/14/11	15 J	6.26 J	1.76 J	0.858 J	14 J	0.8 J	ND(0.53) UJ	10.7 J
GW-C-47S	06/08/11	8.2 J	2.89 J	1.06 J	0.167 J	7.9 J	0.33 J	ND(0.24) UJ	5.26 J
GW-C-47S	12/06/11	7.1	2.64 J	0.726 J	ND(0.2) UJ	6.6 J	0.35	ND(0.52) UJ	4.14 J
GW-C-47DF	03/12/11	--	1.03 J	0.559 J	0.479 J	--	--	--	2.33 J
GW-C-47DF	12/06/11	--	0.339	0.0931 J	0.0807 J	--	--	--	0.578
GW-C-47DF	03/21/12	--	0.553	0.102	0.143	--	--	--	0.897
GW-C-47DF	05/20/12	--	0.288 J	0.0773 J	0.0628 J	--	--	--	0.529 J
GW-C-48	03/11/11	0.071	ND(0.5)	ND(0.2)	ND(0.2)	0.071	ND(0.041)	ND(0.051)	ND(0.5)
GW-C-48 Dup	03/11/11	--	0.299 J	0.108 J	ND(0.1)	--	--	--	0.607 J
GW-C-48	06/11/11	--	ND(0.5)	ND(0.2)	ND(0.2)	--	--	--	ND(0.5)
GW-C-48 Dup	06/11/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	0.46 J
GW-C-48	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	0.4 J
GW-C-48	12/06/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
GW-C-48 Dup	12/06/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
GW-CS	03/11/11	--	ND(0.05)	0.0202 J	ND(0.02)	--	--	--	ND(0.05)
GW-CS	06/08/11	--	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
GW-CS	09/14/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-CS	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-CD	12/05/11	--	ND(0.05) R	ND(0.02) R	ND(0.02) R	--	--	--	ND(0.05) R
GW-CD	03/19/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-CD	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-CDF [a]	06/08/11	--	--	--	--	--	--	--	--
GW-CDF [a]	09/12/11	--	--	--	--	--	--	--	--
GW-CDF [a]	12/01/11	--	--	--	--	--	--	--	--
GW-CDF [a]	03/19/12	--	--	--	--	--	--	--	--
GW-D [a]	06/07/11	--	--	--	--	--	--	--	--
GW-D [a]	09/12/11	--	--	--	--	--	--	--	--
GW-D [a]	12/01/11	--	--	--	--	--	--	--	--
GW-D [a]	03/20/12	--	--	--	--	--	--	--	--
GW-ES	12/15/10	ND(0.029)	1.71	ND(0.1)	0.21 J	ND(0.029)	ND(0.039)	ND(0.049)	2.43
GW-ES Dup	12/15/10	ND(0.029)	1.65	ND(0.1)	0.201 J	ND(0.029)	ND(0.039)	ND(0.049)	2.38
GW-ES	03/15/11	ND(0.032)	2.05	ND(0.1)	0.192 J	ND(0.032)	ND(0.042)	ND(0.053)	3.25
GW-ES	06/08/11	ND(0.03) UJ	1.97	ND(0.1)	0.228 J	ND(0.03) UJ	ND(0.04) UJ	ND(0.05) UJ	3.45
GW-ES	09/15/11	ND(0.031)	1.82	ND(0.1)	0.202 J	ND(0.031)	ND(0.041)	ND(0.051)	2.91
GW-ED	12/17/10	2.2	0.28	0.0303 J	ND(0.02)	1.6 J	0.55	ND(0.5) R	0.306
GW-ED	03/15/11	1.2 J	0.196	ND(0.02)	ND(0.02)	0.55 J	0.63 J	ND(0.5) UJ	0.197
GW-ED	06/08/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
GW-ED	09/15/11	ND(0.029)	0.0929 J	0.0248 J	0.049 J	ND(0.029)	ND(0.038)	ND(0.048)	0.167
GW-FS	10/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-FS	03/08/11	--	ND(0.25) UJ	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25) UJ
GW-FS	06/07/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-FS	09/13/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-GS	10/22/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-GS	03/08/11	--	ND(0.05) R	ND(0.02)	ND(0.02) R	--	--	--	ND(0.05) R
GW-GS	06/07/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-GS	09/13/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-H	11/16/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-H	03/09/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-H	06/27/11	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-H	09/12/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-K	06/07/11	--	1.79 J	ND(0.1)	0.146 J	--	--	--	2.04 J
GW-K	09/12/11	ND(0.15)	2.47	ND(0.1)	0.102 J	ND(0.15)	ND(0.2)	ND(0.25)	2.66 J
GW-K	12/06/11	--	2.07 J	ND(0.2) UJ	ND(0.2) UJ	--	--	--	2.21 J
GW-K	03/19/12	--	2.87	0.0307	0.17	--	--	--	3.02
GW-L	06/07/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-L	09/13/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-L	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
GW-L	03/19/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-MS	10/21/10	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-MS	03/14/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-MS Dup	03/14/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-MS	06/08/11	--	ND(0.25)	ND(0.1)	ND(0.1) UJ	--	--	--	ND(0.25)
GW-MS	09/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)

TABLE 4.6-4. ANALYTICAL RESULTS, EPH-VPH, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
GW-MDF	03/12/11	--	3.46 J	0.637 J	0.377 J	--	--	--	4.93 J
GW-MDF	06/08/11	2.9 J	1.44 J	0.37 J	ND(0.1) UJ	2.9 J	ND(0.4) UJ	ND(0.5) UJ	2.07 J
GW-MDF	09/13/11	--	1.43 J	0.198 J	0.232 J	--	--	--	1.99 J
GW-MDF	12/06/11	--	1.22 J	0.161	0.279 J	--	--	--	1.67 J
GW-NS	12/17/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-NS	03/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-NS	06/07/11	--	0.992	ND(0.1)	ND(0.1)	--	--	--	0.992
GW-NS	09/14/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-NS	12/05/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-NS	03/19/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-NS	05/20/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
GW-ND	12/15/10	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-ND	03/15/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-ND	06/07/11	0.52	ND(0.25)	ND(0.1)	ND(0.1)	0.039	0.11	0.37	ND(0.25)
GW-ND	09/14/11	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
GW-ND	12/06/11	--	ND(0.05)	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05)
GW-ND	03/19/12	--	0.0592	ND(0.02)	ND(0.02)	--	--	--	0.0639
GW-ND	05/18/12	--	ND(0.25)	ND(0.1)	ND(0.1)	--	--	--	ND(0.25)
PA-5R	12/10/11	--	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
PA-5R	03/22/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
PA-5R	05/21/12	--	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
Groundwater Standard or RBSL		1	0.7	1	1	1	1	1	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
[a] - Sample not collected due to insufficient water volume
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist

TABLE 4.6-5A. NORTHEAST AREA, INORGANIC STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Alluvial Sediment Wells - Northeast Area	Antimony, Total [1]	41	7	17.07%	0.0027	Multiple Locations	0	0	0	0.006
	Arsenic, Total [1]	41	23	56.10%	0.0988	GW-NS	7	4	0	0.01
	Barium, Total [2]	41	41	100.00%	0.979	P2RI-23S	0	0	0	1
	Beryllium, Total [1]	41	9	21.95%	0.009	GW-NS	2	1	0	0.004
	Cadmium, Total [2]	41	6	14.63%	0.0084	GW-NS	1	1	4	0.005
	Chromium, Total [2]	41	31	75.61%	0.129	GW-NS	1	1	0	0.1
	Cobalt, Total [2]	41	31	75.61%	0.077	GW-NS	23	10	3	0.0047
	Copper, Total [2]	41	41	100.00%	0.21	GW-NS	0	0	0	1.3
	Cyanide, Total [4]	41	1	2.44%	0.013	P2RI-19S	0	0	0	0.2
	Lead, Total [2]	41	7	17.07%	0.108	GW-NS	5	3	4	0.015
	Mercury, Total [3]	41	5	12.20%	0.00036	GW-NS	0	0	0	0.002
	Nickel, Total [1]	41	41	100.00%	0.246	GW-NS	3	1	0	0.1
	Selenium, Total [1]	41	41	100.00%	0.7	P2RI-19S	31	8	0	0.05
	Silver, Total [1]	41	4	9.76%	0.0015	GW-NS	0	0	0	0.1
	Vanadium, Total [2]	41	23	56.10%	0.268	GW-NS	2	1	0	0.063
	Zinc, Total [2]	41	34	82.93%	0.688	GW-NS	0	0	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northeast Area	Antimony, Total [1]	70	11	15.71%	0.0078	GW-ND	1	1	0	0.006
	Arsenic, Total [1]	70	26	37.14%	0.0858	P2RI-22D	10	6	0	0.01
	Barium, Total [2]	70	70	100.00%	1.07	P2RI-22D	1	1	0	1
	Beryllium, Total [1]	70	13	18.57%	0.0051	P2RI-22D	2	1	0	0.004
	Cadmium, Total [2]	70	20	28.57%	0.0098	P2RI-22D	4	3	11	0.005
	Chromium, Total [2]	70	47	67.14%	0.0936	P2RI-14	0	0	0	0.1
	Cobalt, Total [2]	70	61	87.14%	0.202	P2RI-26D	52	16	3	0.0047
	Copper, Total [2]	70	64	91.43%	0.147	P2RI-14	0	0	0	1.3
	Cyanide, Total [4]	70	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	70	28	40.00%	0.0987	P2RI-25D	7	5	11	0.015
	Mercury, Total [3]	70	16	22.86%	0.00018	GW-ES	0	0	0	0.002
	Nickel, Total [1]	70	70	100.00%	0.583	P2RI-26D	17	7	0	0.1
	Selenium, Total [1]	70	66	94.29%	0.751	GW-ES	35	12	0	0.05
	Silver, Total [1]	70	6	8.57%	0.0013	P2RI-22D	0	0	0	0.1
	Vanadium, Total [2]	70	32	45.71%	0.226	P2RI-14	4	3	0	0.063
	Zinc, Total [2]	70	62	88.57%	1.87	P2RI-12	0	0	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northeast Area	Antimony, Total [1]	6	3	50.00%	0.0095	GW-ED	1	1	0	0.006
	Arsenic, Total [1]	6	5	83.33%	0.0698	P2RI-27D	5	2	0	0.01
	Barium, Total [2]	6	6	100.00%	3.14	P2RI-27D	4	1	0	1
	Beryllium, Total [1]	6	5	83.33%	0.0048	P2RI-27D	1	1	0	0.004
	Cadmium, Total [2]	6	4	66.67%	0.0039	P2RI-27D	0	0	1	0.005
	Chromium, Total [2]	6	6	100.00%	0.11	P2RI-27D	1	1	0	0.1
	Cobalt, Total [2]	6	6	100.00%	0.0501	GW-ED	6	2	0	0.0047
	Copper, Total [2]	6	6	100.00%	0.214	P2RI-27D	0	0	0	1.3
	Cyanide, Total [4]	6	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	6	4	66.67%	0.0452	P2RI-27D	3	1	1	0.015
	Mercury, Total [3]	6	3	50.00%	0.00033	P2RI-27D	0	0	0	0.002
	Nickel, Total [1]	6	6	100.00%	0.196	GW-ED	2	2	0	0.1
	Selenium, Total [1]	6	3	50.00%	0.0129	P2RI-27D	0	0	0	0.05
	Silver, Total [1]	6	1	16.67%	0.00061	P2RI-27D	0	0	0	0.1
	Vanadium, Total [2]	6	6	100.00%	0.311	P2RI-27D	3	2	0	0.063
	Zinc, Total [2]	6	6	100.00%	0.512	P2RI-27D	0	0	0	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-5B. NORTHEAST AREA, VOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Alluvial Sediment Wells - Northeast Area	Benzene	50	2	4.00%	0.0095	P2RI-26S	2	1	0	0.005
	1,3-Butadiene	50	0	0.00%	0	--	0	0	41	0.000016
	2-Butanone	50	5	10.00%	100	P2RI-18SR	1	1	0	4.9
	n-Butylbenzene	50	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	50	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	50	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	50	0	0.00%	0	--	0	0	0	0.72
	Chlorobenzene	50	0	0.00%	0	--	0	0	0	0.1
	Chloroform	50	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	50	0	0.00%	0	--	0	0	0	13
	1,2-Dibromoethane	50	0	0.00%	0	--	0	0	50	0.000004
	1,1-Dichloroethane	50	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	50	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	50	1	2.00%	0.0011	GW-NS	0	0	0	0.7
	n-Hexane	50	0	0.00%	0	--	0	0	0	0.25
	Isopropylbenzene	50	0	0.00%	0	--	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	50	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	50	0	0.00%	0	--	0	0	0	0.53
	Styrene	50	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	50	0	0.00%	0	--	0	0	0	0.005
	Toluene	50	3	6.00%	0.0025	P2RI-26S	0	0	0	1
	1,1,1-Trichloroethane	50	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	50	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	50	1	2.00%	0.0007	P2RI-18SR	0	0	0	0.015
	1,3,5-Trimethylbenzene	50	0	0.00%	0	--	0	0	0	0.087
	m,p-Xylene	50	3	6.00%	0.0034	GW-NS	0	0	0	10
	o-Xylene	50	0	0.00%	0	--	0	0	0	10
	Xylene (Total)	50	3	6.00%	0.0034	GW-NS	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northeast Area	Benzene	82	33	40.24%	1.5	P2RI-26D	22	6	0	0.005
	1,3-Butadiene	82	0	0.00%	0	--	0	0	71	0.000016
	2-Butanone	82	12	14.63%	0.76	P2RI-27S	0	0	0	4.9
	n-Butylbenzene	82	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	82	1	1.22%	0.0002	P2RI-14	0	0	0	1.6
	tert-Butylbenzene	82	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	82	6	7.32%	0.012	P2RI-22D	0	0	0	0.72
	Chlorobenzene	82	0	0.00%	0	--	0	0	0	0.1
	Chloroform	82	2	2.44%	0.0004	P2RI-22D	0	0	0	0.07
	Cyclohexane	82	15	18.29%	0.06	GW-ES	0	0	0	13
	1,2-Dibromoethane	82	0	0.00%	0	--	0	0	82	0.000004
	1,1-Dichloroethane	82	0	0.00%	0	--	0	0	1	0.0024
	1,2-Dichloroethane	82	2	2.44%	0.0074	GW-ES	1	1	1	0.004
	Ethylbenzene	82	7	8.54%	0.019	P2RI-26D	0	0	0	0.7
	n-Hexane	82	9	10.98%	0.0042	P2RI-26D	0	0	0	0.25
	Isopropylbenzene	82	1	1.22%	0.001	P2RI-14	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	82	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	82	0	0.00%	0	--	0	0	0	0.53
	Styrene	82	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	82	0	0.00%	0	--	0	0	0	0.005
	Toluene	82	22	26.83%	0.5	P2RI-26D	0	0	0	1
	1,1,1-Trichloroethane	82	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	82	2	2.44%	0.0003	P2RI-25S	0	0	0	0.005
	1,2,4-Trimethylbenzene	82	4	4.88%	0.0024	P2RI-26D	0	0	0	0.015
	1,3,5-Trimethylbenzene	82	3	3.66%	0.0007	P2RI-26D	0	0	0	0.087
	m,p-Xylene	82	12	14.63%	0.036	P2RI-26D	0	0	0	10
	o-Xylene	82	13	15.85%	0.027	P2RI-26D	0	0	0	10
	Xylene (Total)	82	15	18.29%	0.063	P2RI-26D	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northeast Area	Benzene	8	4	50.00%	0.0005	GW-ED	0	0	0	0.005
	1,3-Butadiene	8	0	0.00%	0	--	0	0	8	0.000016
	2-Butanone	8	0	0.00%	0	--	0	0	0	4.9
	n-Butylbenzene	8	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	8	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	8	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	8	0	0.00%	0	--	0	0	0	0.72
	Chlorobenzene	8	0	0.00%	0	--	0	0	0	0.1
	Chloroform	8	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	8	1	12.50%	0.0003	P2RI-27D	0	0	0	13
	1,2-Dibromoethane	8	0	0.00%	0	--	0	0	8	0.000004
	1,1-Dichloroethane	8	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	8	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	8	1	12.50%	0.0002	P2RI-27D	0	0	0	0.7
	n-Hexane	8	1	12.50%	0.0002	P2RI-27D	0	0	0	0.25
	Isopropylbenzene	8	0	0.00%	0	--	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	8	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	8	0	0.00%	0	--	0	0	0	0.53
	Styrene	8	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	8	0	0.00%	0	--	0	0	0	0.005
	Toluene	8	2	25.00%	0.0012	P2RI-27D	0	0	0	1
	1,1,1-Trichloroethane	8	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	8	2	25.00%	0.0016	GW-ED	0	0	0	0.005
	1,2,4-Trimethylbenzene	8	1	12.50%	0.0002	P2RI-27D	0	0	0	0.015
	1,3,5-Trimethylbenzene	8	0	0.00%	0	--	0	0	0	0.087
	m,p-Xylene	8	2	25.00%	0.0008	Multiple Locations	0	0	0	10
	o-Xylene	8	2	25.00%	0.0004	P2RI-27D	0	0	0	10
	Xylene (Total)	8	3	37.50%	0.0012	P2RI-27D	0	0	0	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-5C. NORTHEAST AREA, SVOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Alluvial Sediment Wells - Northeast Area	Acenaphthene [1]	45	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	45	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	45	0	0.00%	0	--	0	0	5	0.013
	Benzo(a)anthracene [2]	44	2	4.55%	0.000012	Multiple Locations	0	0	1	0.0005
	Benzo(a)pyrene [2]	44	0	0.00%	0	--	0	0	2	0.00005
	Benzo(b)fluoranthene [2]	44	1	2.27%	0.000013	P2RI-19S	0	0	1	0.0005
	Benzo(k)fluoranthene [1]	45	0	0.00%	0	--	0	0	3	0.005
	Bis(2-Ethylhexyl)phthalate [1]	45	2	4.44%	0.003	Multiple Locations	0	0	3	0.006
	Chrysene [1]	45	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	45	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	44	0	0.00%	0	--	0	0	2	0.00005
	1,2-Dichlorobenzene [1]	45	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	45	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	45	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	45	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	45	0	0.00%	0	--	0	0	0	0.38
	Dimethylphthalate [1]	45	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	45	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	45	0	0.00%	0	--	0	0	3	0.069
	1,4-Dioxane [1]	45	0	0.00%	0	--	0	0	45	0.00067
	Fluoranthene [1]	45	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	45	0	0.00%	0	--	0	0	0	1.1
	Indene [1]	45	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	44	1	2.27%	0.000012	P2RI-19S	0	0	1	0.0005
	1-Methylnaphthalene [2]	44	5	11.36%	0.000077	GW-NS	0	0	1	0.00097
	2-Methylnaphthalene [1]	45	0	0.00%	0	--	0	0	0	0.027
	2-Methylphenol [1]	45	0	0.00%	0	--	0	0	0	0.72
	4-Methylphenol [1]	45	0	0.00%	0	--	0	0	0	1.4
	Naphthalene [2]	44	15	34.09%	0.0001	P2RI-28S	0	0	0	0.1
	4-Nitrophenol [1]	45	0	0.00%	0	--	0	0	3	0.06
	Phenanthrene [1]	45	0	0.00%	0	--	0	0	0	NA
	Phenol [1]	45	0	0.00%	0	--	0	0	0	0.3
	Pyrene [1]	45	0	0.00%	0	--	0	0	0	0.83
	Pyridine [1]	45	0	0.00%	0	--	0	0	3	0.015
	Tetraethyl Lead [1]	42	0	0.00%	0	--	0	0	42	0.00000099
	Tetramethyl Lead (TML) [1]	3	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	45	0	0.00%	0	--	0	0	45	0.000021

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northeast Area	Acenaphthene [1]	72	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	72	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	72	1	1.39%	0.005	P2RI-22D	0	0	7	0.013
	Benzo(a)anthracene [2]	71	6	8.45%	0.00018	P2RI-22D	0	0	2	0.0005
	Benzo(a)pyrene [2]	71	7	9.86%	0.00021	Multiple Locations	2	2	3	0.00005
	Benzo(b)fluoranthene [2]	71	7	9.86%	0.0003	P2RI-22D	0	0	2	0.0005
	Benzo(k)fluoranthene [1]	72	0	0.00%	0	--	0	0	4	0.005
	Bis(2-Ethylhexyl)phthalate [1]	72	7	9.72%	0.22	P2RI-22D	1	1	6	0.006
	Chrysene [1]	72	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	72	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	71	1	1.41%	0.000014	P2RI-25S	0	0	4	0.00005
	1,2-Dichlorobenzene [1]	72	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	72	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	72	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	72	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	72	0	0.00%	0	--	0	0	0	0.38
	Dimethylphthalate [1]	72	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	72	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	72	0	0.00%	0	--	0	0	6	0.069
	1,4-Dioxane [1]	72	0	0.00%	0	--	0	0	72	0.00067
	Fluoranthene [1]	71	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	72	0	0.00%	0	--	0	0	0	1.1
	Indene [1]	72	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	71	3	4.23%	0.000046	GW-ND	0	0	2	0.0005
	1-Methylnaphthalene [2]	71	21	29.58%	0.012	P2RI-22D	1	1	2	0.00097
	2-Methylnaphthalene [1]	72	2	2.78%	0.015	P2RI-22D	0	0	0	0.027
	2-Methylphenol [1]	72	2	2.78%	0.002	P2RI-26D	0	0	0	0.72
	4-Methylphenol [1]	72	2	2.78%	0.004	P2RI-26D	0	0	0	1.4
	Naphthalene [2]	71	38	53.52%	0.014	P2RI-22D	0	0	0	0.1
	4-Nitrophenol [1]	72	0	0.00%	0	--	0	0	6	0.06
	Phenanthrene [1]	72	0	0.00%	0	--	0	0	0	NA
	Phenol [1]	72	1	1.39%	0.001	P2RI-14	0	0	0	0.3
	Pyrene [1]	72	0	0.00%	0	--	0	0	0	0.83
	Pyridine [1]	72	1	1.39%	0.005	GW-ES	0	0	6	0.015
	Tetraethyl Lead [1]	71	0	0.00%	0	--	0	0	71	0.00000099
	Tetramethyl Lead (TML) [1]	3	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	72	0	0.00%	0	--	0	0	72	0.000021

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northeast Area	Acenaphthene [1]	8	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	8	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	8	0	0.00%	0	--	0	0	4	0.013
	Benzo(a)anthracene [2]	8	1	12.50%	0.00039	GW-ED	0	0	1	0.0005
	Benzo(a)pyrene [2]	8	1	12.50%	0.00029	GW-ED	1	1	3	0.00005
	Benzo(b)fluoranthene [2]	8	4	50.00%	0.00049	GW-ED	0	0	1	0.0005
	Benzo(k)fluoranthene [1]	8	0	0.00%	0	--	0	0	3	0.005
	Bis(2-Ethylhexyl)phthalate [1]	8	2	25.00%	0.078	GW-ED	1	1	3	0.006
	Chrysene [1]	8	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	8	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	8	1	12.50%	0.00014	GW-ED	1	1	3	0.00005
	1,2-Dichlorobenzene [1]	8	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	8	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	8	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	8	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	8	0	0.00%	0	--	0	0	0	0.38
	Dimethylphthalate [1]	8	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	8	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	8	0	0.00%	0	--	0	0	4	0.069
	1,4-Dioxane [1]	8	0	0.00%	0	--	0	0	8	0.00067
	Fluoranthene [1]	8	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	8	0	0.00%	0	--	0	0	0	1.1
	Indene [1]	8	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	8	1	12.50%	0.00024	GW-ED	0	0	1	0.0005
	1-Methylnaphthalene [2]	8	7	87.50%	0.033	GW-ED	2	1	0	0.00097
	2-Methylnaphthalene [1]	8	3	37.50%	0.03	GW-ED	1	1	0	0.027
	2-Methylphenol [1]	8	0	0.00%	0	--	0	0	0	0.72
	4-Methylphenol [1]	8	0	0.00%	0	--	0	0	0	1.4
	Naphthalene [2]	8	6	75.00%	0.022	GW-ED	0	0	0	0.1
	4-Nitrophenol [1]	8	0	0.00%	0	--	0	0	4	0.06
	Phenanthrene [1]	8	0	0.00%	0	--	0	0	0	NA
	Phenol [1]	8	0	0.00%	0	--	0	0	0	0.3
	Pyrene [1]	8	0	0.00%	0	--	0	0	0	0.83
	Pyridine [1]	8	0	0.00%	0	--	0	0	4	0.015
	Tetraethyl Lead [1]	6	0	0.00%	0	--	0	0	6	0.00000099
	Tetramethyl Lead (TML) [1]	0	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	8	0	0.00%	0	--	0	0	8	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-5D. NORTHEAST AREA, EPH-VPH STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Alluvial Sediment Wells - Northeast Area	Total Extractable Hydrocarbons [1]	1	0	0.00%	0	--	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	46	3	6.52%	28.8	P2RI-18SR	2	2	0	0.7
	C9-C10, Aromatic, Adjusted [2]	46	0	0.00%	0	--	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	46	0	0.00%	0	--	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	1	0	0.00%	0	--	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	1	0	0.00%	0	--	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	1	1	100.00%	0.072	P2RI-23S	0	0	0	1
	Total Purgeable Hydrocarbon [2]	46	3	6.52%	28.8	P2RI-18SR	1	1	0	1

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northeast Area	Total Extractable Hydrocarbons [1]	25	4	16.00%	0.52	GW-ND	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	75	19	25.33%	2.26	P2RI-26D	9	3	3	0.7
	C9-C10, Aromatic, Adjusted [2]	75	4	5.33%	0.898	P2RI-27S	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	75	7	9.33%	0.228	GW-ES	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	25	3	12.00%	0.42	P2RI-21D	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	25	2	8.00%	0.11	GW-ND	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	25	4	16.00%	0.37	GW-ND	0	0	0	1
	Total Purgeable Hydrocarbon [2]	75	20	26.67%	4.1	P2RI-26D	9	3	3	1

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northeast Area	Total Extractable Hydrocarbons [1]	4	3	75.00%	2.2	GW-ED	2	1	0	1
	C5-C8, Aliphatic, Adjusted [2]	8	3	37.50%	0.28	GW-ED	0	0	0	0.7
	C9-C10, Aromatic, Adjusted [2]	8	2	25.00%	0.0303	GW-ED	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	8	1	12.50%	0.049	GW-ED	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	4	2	50.00%	1.6	GW-ED	1	1	0	1
	C11-C22, Aromatic, Adjusted [1]	4	2	50.00%	0.63	GW-ED	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	4	1	25.00%	0.59	P2RI-27D	0	0	0	1
	Total Purgeable Hydrocarbon [2]	8	3	37.50%	0.306	GW-ED	0	0	0	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-6A. SOUTHEAST AREA, INORGANIC STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Alluvial Sediment Wells - Southeast Area	Antimony, Total [1]	66	10	15.15%	0.0023	P2RI-29S	0	0	2	0.006
	Arsenic, Total [1]	66	33	50.00%	0.0386	P2RI-9S	9	7	1	0.01
	Barium, Total [2]	66	66	100.00%	0.753	P2RI-9S	0	0	0	1
	Beryllium, Total [1]	66	10	15.15%	0.0084	P2RI-54SL	1	1	0	0.004
	Cadmium, Total [2]	66	19	28.79%	0.0049	P2RI-33S	0	0	5	0.005
	Chromium, Total [2]	66	58	87.88%	0.0836	P2RI-33S	0	0	0	0.1
	Cobalt, Total [2]	66	62	93.94%	0.0495	P2RI-53S	43	18	1	0.0047
	Copper, Total [2]	66	64	96.97%	0.207	P2RI-54SL	0	0	0	1.3
	Cyanide, Total [4]	66	1	1.52%	0.021	P2RI-9S	0	0	0	0.2
	Lead, Total [2]	66	35	53.03%	0.0455	P2RI-33S	16	15	5	0.015
	Mercury, Total [3]	66	11	16.67%	0.00019	P2RI-33S	0	0	0	0.002
	Nickel, Total [1]	66	60	90.91%	0.0959	P2RI-49S	0	0	0	0.1
	Selenium, Total [1]	66	50	75.76%	0.0961	P2RI-33S	3	1	0	0.05
	Silver, Total [1]	66	4	6.06%	0.00049	P2RI-33S	0	0	0	0.1
	Vanadium, Total [2]	66	28	42.42%	0.117	P2RI-33S	4	4	0	0.063
	Zinc, Total [2]	66	58	87.88%	0.273	P2RI-9S	0	0	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Southeast Area	Antimony, Total [1]	8	3	37.50%	0.003	P2RI-9D	0	0	0	0.006
	Arsenic, Total [1]	8	1	12.50%	0.0026	P2RI-9D	0	0	0	0.01
	Barium, Total [2]	8	8	100.00%	0.0537	P2RI-9D	0	0	0	1
	Beryllium, Total [1]	8	0	0.00%	0	--	0	0	0	0.004
	Cadmium, Total [2]	8	1	12.50%	0.0006	P2RI-33D	0	0	0	0.005
	Chromium, Total [2]	8	2	25.00%	0.0042	P2RI-33D	0	0	0	0.1
	Cobalt, Total [2]	8	5	62.50%	0.0074	P2RI-9D	1	1	0	0.0047
	Copper, Total [2]	8	7	87.50%	0.0076	P2RI-33D	0	0	0	1.3
	Cyanide, Total [4]	8	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	8	0	0.00%	0	--	0	0	0	0.015
	Mercury, Total [3]	8	0	0.00%	0	--	0	0	0	0.002
	Nickel, Total [1]	8	7	87.50%	0.0282	P2RI-9D	0	0	0	0.1
	Selenium, Total [1]	8	0	0.00%	0	--	0	0	0	0.05
	Silver, Total [1]	8	0	0.00%	0	--	0	0	0	0.1
	Vanadium, Total [2]	8	3	37.50%	0.0075	P2RI-33D	0	0	0	0.063
	Zinc, Total [2]	8	7	87.50%	0.0652	P2RI-9D	0	0	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Southeast Area	Antimony, Total [1]	4	2	50.00%	0.0022	P2RI-37D	0	0	0	0.006
	Arsenic, Total [1]	4	1	25.00%	0.0011	P2RI-37D	0	0	0	0.01
	Barium, Total [2]	4	4	100.00%	0.0327	P2RI-37D	0	0	0	1
	Beryllium, Total [1]	4	0	0.00%	0	--	0	0	0	0.004
	Cadmium, Total [2]	4	1	25.00%	0.00064	P2RI-37D	0	0	0	0.005
	Chromium, Total [2]	4	3	75.00%	0.0015	P2RI-37D	0	0	0	0.1
	Cobalt, Total [2]	4	4	100.00%	0.0041	P2RI-37D	0	0	0	0.0047
	Copper, Total [2]	4	3	75.00%	0.0041	P2RI-37D	0	0	0	1.3
	Cyanide, Total [4]	4	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	4	1	25.00%	0.0074	P2RI-37D	0	0	0	0.015
	Mercury, Total [3]	4	0	0.00%	0	--	0	0	0	0.002
	Nickel, Total [1]	4	4	100.00%	0.0068	P2RI-37D	0	0	0	0.1
	Selenium, Total [1]	4	0	0.00%	0	--	0	0	0	0.05
	Silver, Total [1]	4	0	0.00%	0	--	0	0	0	0.1
	Vanadium, Total [2]	4	1	25.00%	0.00096	P2RI-37D	0	0	0	0.063
	Zinc, Total [2]	4	4	100.00%	0.0329	P2RI-37D	0	0	0	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-6B. SOUTHEAST AREA, VOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Alluvial Sediment Wells - Southeast Area	Benzene	72	6	8.33%	0.17	P2RI-53S	5	2	0	0.005
	1,3-Butadiene	72	1	1.39%	0.0024	P2RI-60S	1	1	69	0.000016
	2-Butanone	72	0	0.00%	0	--	0	0	0	4.9
	n-Butylbenzene	72	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	72	1	1.39%	0.0002	P2RI-57S	0	0	0	1.6
	tert-Butylbenzene	72	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	72	2	2.78%	0.0009	P2RI-54SL	0	0	0	0.72
	Chlorobenzene	72	0	0.00%	0	--	0	0	0	0.1
	Chloroform	72	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	72	6	8.33%	0.0033	P2RI-57S	0	0	0	13
	1,2-Dibromoethane	72	0	0.00%	0	--	0	0	72	0.000004
	1,1-Dichloroethane	72	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	72	8	11.11%	0.0039	P2RI-62S	0	0	0	0.004
	Ethylbenzene	72	1	1.39%	0.0013	P2RI-57S	0	0	0	0.7
	n-Hexane	72	1	1.39%	0.0001	P2RI-57S	0	0	0	0.25
	Isopropylbenzene	72	1	1.39%	0.0003	P2RI-57S	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	72	1	1.39%	0.0006	P2RI-57S	0	0	0	0.03
	n-Propylbenzene	72	1	1.39%	0.0002	P2RI-57S	0	0	0	0.53
	Styrene	72	1	1.39%	0.0014	P2RI-60S	0	0	0	0.1
	Tetrachloroethene	72	0	0.00%	0	--	0	0	0	0.005
	Toluene	72	13	18.06%	0.0048	P2RI-60S	0	0	0	1
	1,1,1-Trichloroethane	72	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	72	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	72	2	2.78%	0.0002	P2RI-57S	0	0	0	0.015
	1,3,5-Trimethylbenzene	72	1	1.39%	0.0007	P2RI-57S	0	0	0	0.087
	m,p-Xylene	72	5	6.94%	0.0011	P2RI-57S	0	0	0	10
	o-Xylene	72	2	2.78%	0.0035	P2RI-57S	0	0	0	10
	Xylene (Total)	72	5	6.94%	0.0046	P2RI-57S	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Southeast Area	Benzene	8	2	25.00%	0.0001	Multiple Locations	0	0	0	0.005
	1,3-Butadiene	8	0	0.00%	0	--	0	0	8	0.000016
	2-Butanone	8	0	0.00%	0	--	0	0	0	4.9
	n-Butylbenzene	8	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	8	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	8	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	8	0	0.00%	0	--	0	0	0	0.72
	Chlorobenzene	8	0	0.00%	0	--	0	0	0	0.1
	Chloroform	8	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	8	0	0.00%	0	--	0	0	0	13
	1,2-Dibromoethane	8	0	0.00%	0	--	0	0	8	0.000004
	1,1-Dichloroethane	8	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	8	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	8	1	12.50%	0.0001	P2RI-9D	0	0	0	0.7
	n-Hexane	8	0	0.00%	0	--	0	0	0	0.25
	Isopropylbenzene	8	0	0.00%	0	--	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	8	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	8	0	0.00%	0	--	0	0	0	0.53
	Styrene	8	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	8	0	0.00%	0	--	0	0	0	0.005
	Toluene	8	6	75.00%	0.0005	Multiple Locations	0	0	0	1
	1,1,1-Trichloroethane	8	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	8	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	8	0	0.00%	0	--	0	0	0	0.015
	1,3,5-Trimethylbenzene	8	0	0.00%	0	--	0	0	0	0.087
	m,p-Xylene	8	3	37.50%	0.0003	Multiple Locations	0	0	0	10
	o-Xylene	8	3	37.50%	0.0002	Multiple Locations	0	0	0	10
	Xylene (Total)	8	3	37.50%	0.0005	P2RI-33D	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Southeast Area	Benzene	4	0	0.00%	0	--	0	0	0	0.005
	1,3-Butadiene	4	0	0.00%	0	--	0	0	4	0.000016
	2-Butanone	4	0	0.00%	0	--	0	0	0	4.9
	n-Butylbenzene	4	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	4	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	4	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	4	0	0.00%	0	--	0	0	0	0.72
	Chlorobenzene	4	0	0.00%	0	--	0	0	0	0.1
	Chloroform	4	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	4	0	0.00%	0	--	0	0	0	13
	1,2-Dibromoethane	4	0	0.00%	0	--	0	0	4	0.000004
	1,1-Dichloroethane	4	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	4	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	4	0	0.00%	0	--	0	0	0	0.7
	n-Hexane	4	0	0.00%	0	--	0	0	0	0.25
	Isopropylbenzene	4	0	0.00%	0	--	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	4	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	4	0	0.00%	0	--	0	0	0	0.53
	Styrene	4	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	4	0	0.00%	0	--	0	0	0	0.005
	Toluene	4	2	50.00%	0.0003	P2RI-37D	0	0	0	1
	1,1,1-Trichloroethane	4	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	4	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	4	0	0.00%	0	--	0	0	0	0.015
	1,3,5-Trimethylbenzene	4	0	0.00%	0	--	0	0	0	0.087
	m,p-Xylene	4	1	25.00%	0.0002	P2RI-37D	0	0	0	10
	o-Xylene	4	0	0.00%	0	--	0	0	0	10
	Xylene (Total)	4	1	25.00%	0.0002	P2RI-37D	0	0	0	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-6C. SOUTHEAST AREA, SVOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Alluvial Sediment Wells - Southeast Area

Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Acenaphthene [1]	71	0	0.00%	0	--	0	0	0	0.67
Anthracene [1]	71	0	0.00%	0	--	0	0	0	2.1
Benzenethiol (Thiophenol) [1]	71	0	0.00%	0	--	0	0	2	0.013
Benzo(a)anthracene [2]	70	1	1.43%	0.000077	P2RI-32S	0	0	1	0.0005
Benzo(a)pyrene [2]	70	1	1.43%	0.00013	P2RI-32S	1	1	5	0.00005
Benzo(b)fluoranthene [2]	70	1	1.43%	0.00012	P2RI-32S	0	0	1	0.0005
Benzo(k)fluoranthene [1]	71	0	0.00%	0	--	0	0	1	0.005
Bis(2-Ethylhexyl)phthalate [1]	71	3	4.23%	0.032	P2RI-9S	1	1	1	0.006
Chrysene [1]	71	2	2.82%	0.001	P2RI-32S	0	0	0	0.05
Dibenz(a,h)acridine [1]	70	0	0.00%	0	--	0	0	0	NA
Dibenz(a,h)anthracene [2]	70	1	1.43%	0.000021	P2RI-32S	0	0	5	0.00005
1,2-Dichlorobenzene [1]	71	0	0.00%	0	--	0	0	0	0.6
1,3-Dichlorobenzene [1]	71	0	0.00%	0	--	0	0	0	0.6
1,4-Dichlorobenzene [1]	71	0	0.00%	0	--	0	0	0	0.075
Diethylphthalate [1]	71	0	0.00%	0	--	0	0	0	17
2,4-Dimethylphenol [1]	71	0	0.00%	0	--	0	0	0	0.38
Dimethylphthalate [1]	71	0	0.00%	0	--	0	0	0	270
Di-n-butylphthalate [1]	71	0	0.00%	0	--	0	0	0	2
2,4-Dinitrophenol [1]	71	0	0.00%	0	--	0	0	2	0.069
1,4-Dioxane [1]	71	0	0.00%	0	--	0	0	71	0.00067
Fluoranthene [1]	71	0	0.00%	0	--	0	0	0	0.13
Fluorene [1]	71	0	0.00%	0	--	0	0	0	1.1
Indene [1]	71	0	0.00%	0	--	0	0	0	NA
Indeno(1,2,3-cd)pyrene [2]	70	1	1.43%	0.000033	P2RI-32S	0	0	1	0.0005
1-Methylnaphthalene [2]	70	7	10.00%	0.00012	P2RI-30S	0	0	1	0.00097
2-Methylnaphthalene [1]	71	0	0.00%	0	--	0	0	0	0.027
2-Methylphenol [1]	71	1	1.41%	0.0008	P2RI-60S	0	0	0	0.72
4-Methylphenol [1]	71	0	0.00%	0	--	0	0	0	1.4
Naphthalene [2]	70	19	27.14%	0.005	P2RI-58S	0	0	0	0.1
4-Nitrophenol [1]	71	0	0.00%	0	--	0	0	2	0.06
Phenanthrene [1]	71	0	0.00%	0	--	0	0	0	NA
Phenol [1]	71	2	2.82%	0.003	P2RI-60S	0	0	0	0.3
Pyrene [1]	71	2	2.82%	0.002	P2RI-32S	0	0	0	0.83
Pyridine [1]	71	0	0.00%	0	--	0	0	2	0.015
Tetraethyl Lead [1]	66	0	0.00%	0	--	0	0	66	0.00000099
Tetramethyl Lead (TML) [1]	1	0	0.00%	0	--	0	0	0	NA
Quinoline [1]	71	0	0.00%	0	--	0	0	71	0.000021

Weathered Shale Wells - Southeast Area

Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Acenaphthene [1]	8	0	0.00%	0	--	0	0	0	0.67
Anthracene [1]	8	0	0.00%	0	--	0	0	0	2.1
Benzenethiol (Thiophenol) [1]	8	0	0.00%	0	--	0	0	0	0.013
Benzo(a)anthracene [2]	8	0	0.00%	0	--	0	0	0	0.0005
Benzo(a)pyrene [2]	8	0	0.00%	0	--	0	0	0	0.00005
Benzo(b)fluoranthene [2]	8	0	0.00%	0	--	0	0	0	0.0005
Benzo(k)fluoranthene [1]	8	0	0.00%	0	--	0	0	0	0.005
Bis(2-Ethylhexyl)phthalate [1]	8	0	0.00%	0	--	0	0	0	0.006
Chrysene [1]	8	0	0.00%	0	--	0	0	0	0.05
Dibenz(a,h)acridine [1]	8	0	0.00%	0	--	0	0	0	NA
Dibenz(a,h)anthracene [2]	8	0	0.00%	0	--	0	0	0	0.00005
1,2-Dichlorobenzene [1]	8	0	0.00%	0	--	0	0	0	0.6
1,3-Dichlorobenzene [1]	8	0	0.00%	0	--	0	0	0	0.6
1,4-Dichlorobenzene [1]	8	0	0.00%	0	--	0	0	0	0.075
Diethylphthalate [1]	8	0	0.00%	0	--	0	0	0	17
2,4-Dimethylphenol [1]	8	0	0.00%	0	--	0	0	0	0.38
Dimethylphthalate [1]	8	0	0.00%	0	--	0	0	0	270
Di-n-butylphthalate [1]	8	0	0.00%	0	--	0	0	0	2
2,4-Dinitrophenol [1]	8	0	0.00%	0	--	0	0	0	0.069
1,4-Dioxane [1]	8	0	0.00%	0	--	0	0	8	0.00067
Fluoranthene [1]	8	0	0.00%	0	--	0	0	0	0.13
Fluorene [1]	8	0	0.00%	0	--	0	0	0	1.1
Indene [1]	8	0	0.00%	0	--	0	0	0	NA
Indeno(1,2,3-cd)pyrene [2]	8	0	0.00%	0	--	0	0	0	0.0005
1-Methylnaphthalene [2]	8	4	50.00%	0.000055	P2RI-9D	0	0	0	0.00097
2-Methylnaphthalene [1]	8	0	0.00%	0	--	0	0	0	0.027
2-Methylphenol [1]	8	0	0.00%	0	--	0	0	0	0.72
4-Methylphenol [1]	8	0	0.00%	0	--	0	0	0	1.4
Naphthalene [2]	8	5	62.50%	0.000092	P2RI-9D	0	0	0	0.1
4-Nitrophenol [1]	8	0	0.00%	0	--	0	0	0	0.06
Phenanthrene [1]	8	0	0.00%	0	--	0	0	0	NA
Phenol [1]	8	0	0.00%	0	--	0	0	0	0.3
Pyrene [1]	8	0	0.00%	0	--	0	0	0	0.83
Pyridine [1]	8	0	0.00%	0	--	0	0	0	0.015
Tetraethyl Lead [1]	8	0	0.00%	0	--	0	0	8	0.00000099
Tetramethyl Lead (TML) [1]	0	0	0.00%	0	--	0	0	0	NA
Quinoline [1]	8	0	0.00%	0	--	0	0	8	0.000021

Competent Shale Wells - Southeast Area

Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Acenaphthene [1]	4	0	0.00%	0	--	0	0	0	0.67
Anthracene [1]	4	0	0.00%	0	--	0	0	0	2.1
Benzenethiol (Thiophenol) [1]	4	0	0.00%	0	--	0	0	0	0.013
Benzo(a)anthracene [2]	4	0	0.00%	0	--	0	0	0	0.0005
Benzo(a)pyrene [2]	4	0	0.00%	0	--	0	0	0	0.00005
Benzo(b)fluoranthene [2]	4	0	0.00%	0	--	0	0	0	0.0005
Benzo(k)fluoranthene [1]	4	0	0.00%	0	--	0	0	0	0.005
Bis(2-Ethylhexyl)phthalate [1]	4	0	0.00%	0	--	0	0	0	0.006
Chrysene [1]	4	0	0.00%	0	--	0	0	0	0.05
Dibenz(a,h)acridine [1]	4	0	0.00%	0	--	0	0	0	NA
Dibenz(a,h)anthracene [2]	4	0	0.00%	0	--	0	0	0	0.00005
1,2-Dichlorobenzene [1]	4	0	0.00%	0	--	0	0	0	0.6
1,3-Dichlorobenzene [1]	4	0	0.00%	0	--	0	0	0	0.6
1,4-Dichlorobenzene [1]	4	0	0.00%	0	--	0	0	0	0.075
Diethylphthalate [1]	4	0	0.00%	0	--	0	0	0	17
2,4-Dimethylphenol [1]	4	0	0.00%	0	--	0	0	0	0.38
Dimethylphthalate [1]	4	0	0.00%	0	--	0	0	0	270
Di-n-butylphthalate [1]	4	0	0.00%	0	--	0	0	0	2
2,4-Dinitrophenol [1]	4	0	0.00%	0	--	0	0	0	0.069
1,4-Dioxane [1]	4	0	0.00%	0	--	0	0	4	0.00067
Fluoranthene [1]	4	0	0.00%	0	--	0	0	0	0.13
Fluorene [1]	4	0	0.00%	0	--	0	0	0	1.1
Indene [1]	4	0	0.00%	0	--	0	0	0	NA
Indeno(1,2,3-cd)pyrene [2]	4	0	0.00%	0	--	0	0	0	0.0005
1-Methylnaphthalene [2]	4	0	0.00%	0	--	0	0	0	0.00097
2-Methylnaphthalene [1]	4	0	0.00%	0	--	0	0	0	0.027
2-Methylphenol [1]	4	0	0.00%	0	--	0	0	0	0.72
4-Methylphenol [1]	4	0	0.00%	0	--	0	0	0	1.4
Naphthalene [2]	4	0	0.00%	0	--	0	0	0	0.1
4-Nitrophenol [1]	4	0	0.00%	0	--	0	0	0	0.06
Phenanthrene [1]	4	0	0.00%	0	--	0	0	0	NA
Phenol [1]	4	0	0.00%	0	--	0	0	0	0.3
Pyrene [1]	4	0	0.00%	0	--	0	0	0	0.83
Pyridine [1]	4	0	0.00%	0	--	0	0	0	0.015
Tetraethyl Lead [1]	4	0	0.00%	0	--	0	0	4	0.00000099
Tetramethyl Lead (TML) [1]	0	0	0.00%	0	--	0	0	0	NA
Quinoline [1]	4	0	0.00%	0	--	0	0	4	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-6D. SOUTHEAST AREA, EPH-VPH STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Alluvial Sediment Wells - Southeast Area	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
	Total Extractable Hydrocarbons [1]	10	5	50.00%	0.56	P2RI-53S	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	72	4	5.56%	1.88	P2RI-53S	4	1	0	0.7
	C9-C10, Aromatic, Adjusted [2]	72	7	9.72%	2.42	P2RI-53S	3	1	0	1
	C9-C12, Aliphatic, Adjusted [2]	72	6	8.33%	1.11	P2RI-53S	1	1	0	1
	C9-C18, Aliphatic, Adjusted [1]	10	4	40.00%	0.061	P2RI-53S	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	10	5	50.00%	0.53	P2RI-53S	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	10	0	0.00%	0	--	0	0	0	1
	Total Purgeable Hydrocarbon [2]	72	7	9.72%	4.54	P2RI-53S	4	1	0	1

Weathered Shale Wells - Southeast Area	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
	Total Extractable Hydrocarbons [1]	0	0	0.00%	0	--	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	8	0	0.00%	0	--	0	0	0	0.7
	C9-C10, Aromatic, Adjusted [2]	8	0	0.00%	0	--	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	8	0	0.00%	0	--	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	Total Purgeable Hydrocarbon [2]	8	0	0.00%	0	--	0	0	0	1

Competent Shale Wells - Southeast Area	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
	Total Extractable Hydrocarbons [1]	0	0	0.00%	0	--	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	4	0	0.00%	0	--	0	0	0	0.7
	C9-C10, Aromatic, Adjusted [2]	4	0	0.00%	0	--	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	4	0	0.00%	0	--	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	Total Purgeable Hydrocarbon [2]	4	0	0.00%	0	--	0	0	0	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-7A. SOUTHWEST AREA, INORGANIC STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Southwest Area	Antimony, Total [1]	10	6	60.00%	0.0037	P2RI-36S	0	0	0	0.006
	Arsenic, Total [1]	10	6	60.00%	0.0727	P2RI-35S	2	2	0	0.01
	Barium, Total [2]	10	10	100.00%	1.51	P2RI-35S	1	1	0	1
	Beryllium, Total [1]	10	3	30.00%	0.0049	P2RI-35S	1	1	0	0.004
	Cadmium, Total [2]	10	3	30.00%	0.0039	P2RI-35S	0	0	0	0.005
	Chromium, Total [2]	10	6	60.00%	0.156	P2RI-35S	1	1	0	0.1
	Cobalt, Total [2]	10	10	100.00%	0.0438	P2RI-35S	6	3	0	0.0047
	Copper, Total [2]	10	7	70.00%	0.115	P2RI-35S	0	0	0	1.3
	Cyanide, Total [4]	10	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	10	7	70.00%	0.0569	P2RI-35S	3	3	0	0.015
	Mercury, Total [3]	10	2	20.00%	0.00005	P2RI-36S	0	0	0	0.002
	Nickel, Total [1]	10	10	100.00%	0.206	P2RI-35S	1	1	0	0.1
	Selenium, Total [1]	10	8	80.00%	0.137	Multiple Locations	2	1	0	0.05
	Silver, Total [1]	10	1	10.00%	0.0011	P2RI-35S	0	0	0	0.1
	Vanadium, Total [2]	10	4	40.00%	0.39	P2RI-35S	1	1	0	0.063
	Zinc, Total [2]	10	10	100.00%	0.621	P2RI-35S	0	0	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Southwest Area	Antimony, Total [1]	4	3	75.00%	0.0031	P2RI-34D	0	0	0	0.006
	Arsenic, Total [1]	4	3	75.00%	0.0355	P2RI-34D	1	1	0	0.01
	Barium, Total [2]	4	4	100.00%	0.8	P2RI-34D	0	0	0	1
	Beryllium, Total [1]	4	1	25.00%	0.0016	P2RI-34D	0	0	0	0.004
	Cadmium, Total [2]	4	2	50.00%	0.0023	P2RI-34D	0	0	0	0.005
	Chromium, Total [2]	4	1	25.00%	0.057	P2RI-34D	0	0	0	0.1
	Cobalt, Total [2]	4	4	100.00%	0.0171	P2RI-34D	1	1	0	0.0047
	Copper, Total [2]	4	3	75.00%	0.0474	P2RI-34D	0	0	0	1.3
	Cyanide, Total [4]	4	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	4	1	25.00%	0.0233	P2RI-34D	1	1	0	0.015
	Mercury, Total [3]	4	0	0.00%	0	--	0	0	0	0.002
	Nickel, Total [1]	4	4	100.00%	0.0606	P2RI-34D	0	0	0	0.1
	Selenium, Total [1]	4	3	75.00%	0.0061	P2RI-34D	0	0	0	0.05
	Silver, Total [1]	4	0	0.00%	0	--	0	0	0	0.1
	Vanadium, Total [2]	4	2	50.00%	0.164	P2RI-34D	1	1	0	0.063
	Zinc, Total [2]	4	3	75.00%	0.194	P2RI-34D	0	0	0	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-7B. SOUTHWEST AREA, VOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Southwest Area	Benzene	11	0	0.00%	0	--	0	0	0	0.005
	1,3-Butadiene	11	0	0.00%	0	--	0	0	9	0.000016
	2-Butanone	11	0	0.00%	0	--	0	0	0	4.9
	n-Butylbenzene	11	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	11	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	11	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	11	1	9.09%	0.001	P2RI-55S	0	0	0	0.72
	Chlorobenzene	11	0	0.00%	0	--	0	0	0	0.1
	Chloroform	11	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	11	0	0.00%	0	--	0	0	0	13
	1,2-Dibromoethane	11	0	0.00%	0	--	0	0	11	0.000004
	1,1-Dichloroethane	11	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	11	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	11	0	0.00%	0	--	0	0	0	0.7
	n-Hexane	11	1	9.09%	0.0002	P2RI-35S	0	0	0	0.25
	Isopropylbenzene	11	0	0.00%	0	--	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	11	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	11	0	0.00%	0	--	0	0	0	0.53
	Styrene	11	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	11	0	0.00%	0	--	0	0	0	0.005
	Toluene	11	2	18.18%	0.0002	P2RI-35S	0	0	0	1
	1,1,1-Trichloroethane	11	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	11	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	11	0	0.00%	0	--	0	0	0	0.015
	1,3,5-Trimethylbenzene	11	0	0.00%	0	--	0	0	0	0.087
	m,p-Xylene	11	0	0.00%	0	--	0	0	0	10
	o-Xylene	11	0	0.00%	0	--	0	0	0	10
	Xylene (Total)	11	0	0.00%	0	--	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Southwest Area	Benzene	4	4	100.00%	0.0002	Multiple Locations	0	0	0	0.005
	1,3-Butadiene	4	0	0.00%	0	--	0	0	2	0.000016
	2-Butanone	4	0	0.00%	0	--	0	0	0	4.9
	n-Butylbenzene	4	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	4	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	4	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	4	1	25.00%	0.0006	P2RI-34D	0	0	0	0.72
	Chlorobenzene	4	0	0.00%	0	--	0	0	0	0.1
	Chloroform	4	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	4	2	50.00%	0.0002	Multiple Locations	0	0	0	13
	1,2-Dibromoethane	4	0	0.00%	0	--	0	0	4	0.000004
	1,1-Dichloroethane	4	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	4	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	4	2	50.00%	0.0002	Multiple Locations	0	0	0	0.7
	n-Hexane	4	1	25.00%	0.0001	P2RI-34D	0	0	0	0.25
	Isopropylbenzene	4	0	0.00%	0	--	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	4	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	4	0	0.00%	0	--	0	0	0	0.53
	Styrene	4	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	4	0	0.00%	0	--	0	0	0	0.005
	Toluene	4	3	75.00%	0.0007	P2RI-34D	0	0	0	1
	1,1,1-Trichloroethane	4	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	4	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	4	0	0.00%	0	--	0	0	0	0.015
	1,3,5-Trimethylbenzene	4	0	0.00%	0	--	0	0	0	0.087
	m,p-Xylene	4	2	50.00%	0.0004	P2RI-34D	0	0	0	10
	o-Xylene	4	1	25.00%	0.0003	P2RI-34D	0	0	0	10
	Xylene (Total)	4	2	50.00%	0.0006	P2RI-34D	0	0	0	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-7C. SOUTHWEST AREA, SVOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Southwest Area	Acenaphthene [1]	11	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	11	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	11	0	0.00%	0	--	0	0	1	0.013
	Benzo(a)anthracene [2]	11	2	18.18%	0.000014	P2RI-35S	0	0	0	0.0005
	Benzo(a)pyrene [2]	11	1	9.09%	0.000012	P2RI-35S	0	0	0	0.00005
	Benzo(b)fluoranthene [2]	11	4	36.36%	0.000023	P2RI-35S	0	0	0	0.0005
	Benzo(k)fluoranthene [1]	11	0	0.00%	0	--	0	0	1	0.005
	Bis(2-Ethylhexyl)phthalate [1]	11	0	0.00%	0	--	0	0	1	0.006
	Chrysene [1]	11	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	11	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	11	0	0.00%	0	--	0	0	0	0.00005
	1,2-Dichlorobenzene [1]	11	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	11	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	11	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	11	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	11	0	0.00%	0	--	0	0	0	0.38
	Dimethylphthalate [1]	11	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	11	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	11	0	0.00%	0	--	0	0	1	0.069
	1,4-Dioxane [1]	11	0	0.00%	0	--	0	0	11	0.00067
	Fluoranthene [1]	11	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	11	0	0.00%	0	--	0	0	0	1.1
	Indene [1]	11	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	11	0	0.00%	0	--	0	0	0	0.0005
	1-Methylnaphthalene [2]	11	6	54.55%	0.00018	P2RI-35S	0	0	0	0.00097
	2-Methylnaphthalene [1]	11	1	9.09%	0.0001	P2RI-36S	0	0	0	0.027
	2-Methylphenol [1]	11	0	0.00%	0	--	0	0	0	0.72
	4-Methylphenol [1]	11	0	0.00%	0	--	0	0	0	1.4
	Naphthalene [2]	11	6	54.55%	0.00016	P2RI-35S	0	0	0	0.1
	4-Nitrophenol [1]	11	0	0.00%	0	--	0	0	1	0.06
	Phenanthrene [1]	11	0	0.00%	0	--	0	0	0	NA
	Phenol [1]	11	0	0.00%	0	--	0	0	0	0.3
	Pyrene [1]	11	0	0.00%	0	--	0	0	0	0.83
	Pyridine [1]	11	0	0.00%	0	--	0	0	1	0.015
	Tetraethyl Lead [1]	10	0	0.00%	0	--	0	0	10	0.00000099
	Tetramethyl Lead (TML) [1]	0	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	11	0	0.00%	0	--	0	0	11	0.000021

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Southwest Area	Acenaphthene [1]	4	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	4	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	4	0	0.00%	0	--	0	0	0	0.013
	Benzo(a)anthracene [2]	4	1	25.00%	0.000023	P2RI-34D	0	0	0	0.0005
	Benzo(a)pyrene [2]	4	1	25.00%	0.000038	P2RI-34D	0	0	0	0.00005
	Benzo(b)fluoranthene [2]	4	1	25.00%	0.000058	P2RI-34D	0	0	0	0.0005
	Benzo(k)fluoranthene [1]	4	0	0.00%	0	--	0	0	0	0.005
	Bis(2-Ethylhexyl)phthalate [1]	4	0	0.00%	0	--	0	0	0	0.006
	Chrysene [1]	4	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	4	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	4	0	0.00%	0	--	0	0	0	0.00005
	1,2-Dichlorobenzene [1]	4	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	4	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	4	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	4	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	4	0	0.00%	0	--	0	0	0	0.38
	Dimethylphthalate [1]	4	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	4	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	4	0	0.00%	0	--	0	0	0	0.069
	1,4-Dioxane [1]	4	0	0.00%	0	--	0	0	4	0.00067
	Fluoranthene [1]	4	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	4	0	0.00%	0	--	0	0	0	1.1
	Indene [1]	4	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	4	1	25.00%	0.000021	P2RI-34D	0	0	0	0.0005
	1-Methylnaphthalene [2]	4	3	75.00%	0.0013	P2RI-34D	1	1	0	0.00097
	2-Methylnaphthalene [1]	4	1	25.00%	0.001	P2RI-34D	0	0	0	0.027
	2-Methylphenol [1]	4	0	0.00%	0	--	0	0	0	0.72
	4-Methylphenol [1]	4	0	0.00%	0	--	0	0	0	1.4
	Naphthalene [2]	4	4	100.00%	0.001	P2RI-34D	0	0	0	0.1
	4-Nitrophenol [1]	4	0	0.00%	0	--	0	0	0	0.06
	Phenanthrene [1]	4	0	0.00%	0	--	0	0	0	NA
	Phenol [1]	4	0	0.00%	0	--	0	0	0	0.3
	Pyrene [1]	4	0	0.00%	0	--	0	0	0	0.83
	Pyridine [1]	4	0	0.00%	0	--	0	0	0	0.015
	Tetraethyl Lead [1]	4	0	0.00%	0	--	0	0	4	0.00000099
	Tetramethyl Lead (TML) [1]	1	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	4	0	0.00%	0	--	0	0	4	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-7D. SOUTHWEST AREA, EPH-VPH STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT,
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Southwest Area	Total Extractable Hydrocarbons [1]	0	0	0.00%	0	--	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	11	0	0.00%	0	--	0	0	0	0.7
	C9-C10, Aromatic, Adjusted [2]	11	0	0.00%	0	--	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	11	0	0.00%	0	--	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	Total Purgeable Hydrocarbon [2]	11	0	0.00%	0	--	0	0	0	1

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Southwest Area	Total Extractable Hydrocarbons [1]	0	0	0.00%	0	--	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	4	0	0.00%	0	--	0	0	0	0.7
	C9-C10, Aromatic, Adjusted [2]	4	0	0.00%	0	--	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	4	1	25.00%	0.0246	P2RI-34D	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	0	0	0.00%	0	--	0	0	0	1
	Total Purgeable Hydrocarbon [2]	4	0	0.00%	0	--	0	0	0	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-8A. CENTRAL AREA, INORGANIC STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Central Area	Antimony, Total [1]	46	10	21.74%	0.0118	Multiple Locations	2	1	1	0.006
	Arsenic, Total [1]	46	25	54.35%	1.28	GW-H	15	6	1	0.01
	Barium, Total [2]	46	46	100.00%	2.75	GW-H	1	1	0	1
	Beryllium, Total [1]	46	16	34.78%	0.0631	GW-H	4	2	0	0.004
	Cadmium, Total [2]	46	11	23.91%	0.0323	GW-H	2	1	13	0.005
	Chromium, Total [2]	46	40	86.96%	1.72	GW-H	4	2	0	0.1
	Cobalt, Total [2]	46	39	84.78%	0.745	GW-H	35	11	1	0.0047
	Copper, Total [2]	46	44	95.65%	1.39	GW-H	1	1	0	1.3
	Cyanide, Total [4]	46	4	8.70%	0.013	P2RI-6	0	0	0	0.2
	Lead, Total [2]	46	18	39.13%	0.532	GW-H	9	4	12	0.015
	Mercury, Total [3]	46	21	45.65%	0.0058	GW-H	2	1	0	0.002
	Nickel, Total [1]	46	43	93.48%	2.86	GW-H	21	6	0	0.1
	Selenium, Total [1]	46	43	93.48%	0.606	P2RI-1S	25	9	0	0.05
	Silver, Total [1]	46	14	30.43%	0.0109	GW-H	0	0	0	0.1
	Vanadium, Total [2]	46	35	76.09%	3.53	GW-H	5	3	0	0.063
	Zinc, Total [2]	46	42	91.30%	7.34	GW-H	2	1	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Central Area	Antimony, Total [1]	15	5	33.33%	0.0044	P2RI-44D	0	0	0	0.006
	Arsenic, Total [1]	15	10	66.67%	0.82	GW-A	9	4	0	0.01
	Barium, Total [2]	15	15	100.00%	18.6	GW-A	1	1	0	1
	Beryllium, Total [1]	15	8	53.33%	0.0525	GW-A	2	1	0	0.004
	Cadmium, Total [2]	15	7	46.67%	0.0288	GW-A	2	1	1	0.005
	Chromium, Total [2]	15	14	93.33%	2.35	GW-A	3	1	0	0.1
	Cobalt, Total [2]	15	15	100.00%	0.619	GW-A	12	4	0	0.0047
	Copper, Total [2]	15	15	100.00%	1.4	GW-A	1	1	0	1.3
	Cyanide, Total [4]	12	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	15	9	60.00%	0.617	GW-A	5	3	1	0.015
	Mercury, Total [3]	15	5	33.33%	0.0042	GW-A	1	1	0	0.002
	Nickel, Total [1]	15	15	100.00%	2.05	GW-A	5	2	0	0.1
	Selenium, Total [1]	15	12	80.00%	0.0526	P2RI-44D	1	1	0	0.05
	Silver, Total [1]	15	3	20.00%	0.006	GW-A	0	0	0	0.1
	Vanadium, Total [2]	15	15	100.00%	4.41	GW-A	6	4	0	0.063
	Zinc, Total [2]	15	15	100.00%	6.21	GW-A	1	1	0	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-8B. CENTRAL AREA, VOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Central Area	Benzene	73	35	47.95%	3.1	P2RI-6	25	6	0	0.005
	1,3-Butadiene	73	1	1.37%	0.49	P2RI-6	1	1	72	0.000016
	2-Butanone	73	13	17.81%	0.085	P2RI-43S	0	0	0	4.9
	n-Butylbenzene	73	3	4.11%	0.0034	P2RI-43S	0	0	0	0.78
	sec-Butylbenzene	73	4	5.48%	0.004	P2RI-43S	0	0	0	1.6
	tert-Butylbenzene	73	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	73	13	17.81%	0.031	P2RI-2	0	0	0	0.72
	Chlorobenzene	73	0	0.00%	0	--	0	0	0	0.1
	Chloroform	74	1	1.35%	0.002	P2RI-4S	0	0	0	0.07
	Cyclohexane	73	35	47.95%	0.98	P2RI-4S	0	0	0	13
	1,2-Dibromoethane	73	0	0.00%	0	--	0	0	73	0.000004
	1,1-Dichloroethane	73	0	0.00%	0	--	0	0	4	0.0024
	1,2-Dichloroethane	73	2	2.74%	0.11	P2RI-6	1	1	3	0.004
	Ethylbenzene	73	30	41.10%	0.41	P2RI-6	0	0	0	0.7
	n-Hexane	73	21	28.77%	0.21	GW-K	0	0	0	0.25
	Isopropylbenzene	73	16	21.92%	0.036	P2RI-6	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	73	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	73	16	21.92%	0.038	Multiple Locations	0	0	0	0.53
	Styrene	73	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	73	0	0.00%	0	--	0	0	0	0.005
	Toluene	73	34	46.58%	4.8	P2RI-6	10	3	0	1
	1,1,1-Trichloroethane	73	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	73	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	73	29	39.73%	0.26	Multiple Locations	13	3	0	0.015
	1,3,5-Trimethylbenzene	73	29	39.73%	0.08	P2RI-6	0	0	0	0.087
	m,p-Xylene	73	38	52.05%	1.7	P2RI-6	0	0	0	10
	o-Xylene	73	33	45.21%	0.98	P2RI-6	0	0	0	10
	Xylene (Total)	73	38	52.05%	2.6	P2RI-6	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Central Area	Benzene	24	14	58.33%	0.012	GW-A	1	1	0	0.005
	1,3-Butadiene	24	1	4.17%	0.0003	P2RI-41D	1	1	23	0.000016
	2-Butanone	24	2	8.33%	0.01	GW-A	0	0	0	4.9
	n-Butylbenzene	24	0	0.00%	0	--	0	0	0	0.78
	sec-Butylbenzene	24	0	0.00%	0	--	0	0	0	1.6
	tert-Butylbenzene	24	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	24	5	20.83%	0.0029	P2RI-3D	0	0	0	0.72
	Chlorobenzene	24	0	0.00%	0	--	0	0	0	0.1
	Chloroform	24	1	4.17%	0.0004	GW-A	0	0	0	0.07
	Cyclohexane	24	10	41.67%	0.013	GW-A	0	0	0	13
	1,2-Dibromoethane	24	0	0.00%	0	--	0	0	24	0.000004
	1,1-Dichloroethane	24	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	24	0	0.00%	0	--	0	0	0	0.004
	Ethylbenzene	24	7	29.17%	0.003	GW-A	0	0	0	0.7
	n-Hexane	24	7	29.17%	0.0008	GW-A	0	0	0	0.25
	Isopropylbenzene	24	1	4.17%	0.0003	GW-A	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	24	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	24	1	4.17%	0.0002	GW-A	0	0	0	0.53
	Styrene	24	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	24	0	0.00%	0	--	0	0	0	0.005
	Toluene	24	14	58.33%	0.011	GW-A	0	0	0	1
	1,1,1-Trichloroethane	24	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	24	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	24	4	16.67%	0.0013	GW-A	0	0	0	0.015
	1,3,5-Trimethylbenzene	24	2	8.33%	0.0007	GW-A	0	0	0	0.087
	m,p-Xylene	24	10	41.67%	0.0083	GW-A	0	0	0	10
	o-Xylene	24	6	25.00%	0.0011	GW-A	0	0	0	10
	Xylene (Total)	24	10	41.67%	0.0093	GW-A	0	0	0	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-8C. CENTRAL AREA, SVOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Central Area	Acenaphthene [1]	52	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	52	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	52	0	0.00%	0	--	0	0	9	0.013
	Benzo(a)anthracene [2]	52	4	7.69%	0.00011	GW-H	0	0	4	0.0005
	Benzo(a)pyrene [2]	51	2	3.92%	0.000022	P2RI-50S	0	0	8	0.00005
	Benzo(b)fluoranthene [2]	51	6	11.76%	0.00017	GW-H	0	0	4	0.0005
	Benzo(k)fluoranthene [1]	52	0	0.00%	0	--	0	0	7	0.005
	Bis(2-Ethylhexyl)phthalate [1]	52	4	7.69%	0.025	P2RI-6	1	1	9	0.006
	Chrysene [1]	52	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	51	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	51	1	1.96%	0.000013	P2RI-50S	0	0	8	0.00005
	1,2-Dichlorobenzene [1]	52	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	52	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	52	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	52	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	52	1	1.92%	0.003	P2RI-43S	0	0	0	0.38
	Dimethylphthalate [1]	52	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	52	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	52	0	0.00%	0	--	0	0	9	0.069
	1,4-Dioxane [1]	52	0	0.00%	0	--	0	0	52	0.00067
	Fluoranthene [1]	52	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	52	2	3.85%	0.002	GW-K	0	0	0	1.1
	Indene [1]	52	1	1.92%	0.018	P2RI-43S	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	51	2	3.92%	0.000011	Multiple Locations	0	0	4	0.0005
	1-Methylnaphthalene [2]	52	25	48.08%	0.017	P2RI-6	10	4	3	0.00097
	2-Methylnaphthalene [1]	52	12	23.08%	0.042	P2RI-6	2	1	0	0.027
	2-Methylphenol [1]	52	6	11.54%	0.025	P2RI-43S	0	0	0	0.72
	4-Methylphenol [1]	52	1	1.92%	0.006	P2RI-43S	0	0	0	1.4
	Naphthalene [2]	52	31	59.62%	0.11	P2RI-6	1	1	0	0.1
	4-Nitrophenol [1]	52	0	0.00%	0	--	0	0	9	0.06
	Phenanthrene [1]	52	2	3.85%	0.002	GW-K	0	0	0	NA
	Phenol [1]	52	7	13.46%	0.11	P2RI-43S	0	0	0	0.3
	Pyrene [1]	52	2	3.85%	0.003	GW-K	0	0	0	0.83
	Pyridine [1]	52	0	0.00%	0	--	0	0	9	0.015
	Tetraethyl Lead [1]	48	0	0.00%	0	--	0	0	48	0.00000099
	Tetramethyl Lead (TML) [1]	4	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	52	0	0.00%	0	--	0	0	52	0.000021

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Central Area	Acenaphthene [1]	18	2	11.11%	0.0001	Multiple Locations	0	0	0	0.67
	Anthracene [1]	18	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	18	0	0.00%	0	--	0	0	3	0.013
	Benzo(a)anthracene [2]	18	4	22.22%	0.001	GW-A	1	1	1	0.0005
	Benzo(a)pyrene [2]	18	5	27.78%	0.001	GW-A	2	1	2	0.00005
	Benzo(b)fluoranthene [2]	18	5	27.78%	0.002	GW-A	1	1	1	0.0005
	Benzo(k)fluoranthene [1]	18	1	5.56%	0.0001	GW-A	0	0	1	0.005
	Bis(2-Ethylhexyl)phthalate [1]	18	5	27.78%	0.1	GW-A	4	1	1	0.006
	Chrysene [1]	18	3	16.67%	0.002	GW-A	0	0	0	0.05
	Dibenz(a,h)acridine [1]	18	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	18	0	0.00%	0	--	0	0	4	0.00005
	1,2-Dichlorobenzene [1]	18	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	18	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	18	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	18	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	18	0	0.00%	0	--	0	0	0	0.38
	Dimethylphthalate [1]	18	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	18	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	18	0	0.00%	0	--	0	0	2	0.069
	1,4-Dioxane [1]	18	0	0.00%	0	--	0	0	18	0.00067
	Fluoranthene [1]	18	2	11.11%	0.002	GW-A	0	0	0	0.13
	Fluorene [1]	18	3	16.67%	0.002	GW-A	0	0	0	1.1
	Indene [1]	18	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	18	2	11.11%	0.00013	GW-A	0	0	1	0.0005
	1-Methylnaphthalene [2]	18	15	83.33%	0.038	GW-A	2	1	1	0.00097
	2-Methylnaphthalene [1]	18	6	33.33%	0.05	GW-A	1	1	0	0.027
	2-Methylphenol [1]	18	0	0.00%	0	--	0	0	0	0.72
	4-Methylphenol [1]	18	0	0.00%	0	--	0	0	0	1.4
	Naphthalene [2]	18	11	61.11%	0.052	GW-A	0	0	0	0.1
	4-Nitrophenol [1]	18	0	0.00%	0	--	0	0	2	0.06
	Phenanthrene [1]	18	4	22.22%	0.01	GW-A	0	0	0	NA
	Phenol [1]	18	0	0.00%	0	--	0	0	0	0.3
	Pyrene [1]	18	3	16.67%	0.003	GW-A	0	0	0	0.83
	Pyridine [1]	18	0	0.00%	0	--	0	0	2	0.015
	Tetraethyl Lead [1]	16	0	0.00%	0	--	0	0	16	0.00000099
	Tetramethyl Lead (TML) [1]	3	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	18	0	0.00%	0	--	0	0	18	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-8D. CENTRAL AREA, EPH-VPH STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Central Area	Total Extractable Hydrocarbons [1]	11	9	81.82%	4.6	P2RI-6	4	2	0	1
	C5-C8, Aliphatic, Adjusted [2]	71	25	35.21%	13.2	P2RI-6	17	4	0	0.7
	C9-C10, Aromatic, Adjusted [2]	71	20	28.17%	2	P2RI-6	7	3	0	1
	C9-C12, Aliphatic, Adjusted [2]	71	23	32.39%	3.45	P2RI-43S	7	3	0	1
	C9-C18, Aliphatic, Adjusted [1]	11	9	81.82%	4.2	P2RI-6	4	2	0	1
	C11-C22, Aromatic, Adjusted [1]	11	7	63.64%	0.31	P2RI-6	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	11	0	0.00%	0	--	0	0	0	1
	Total Purgeable Hydrocarbon [2]	71	26	36.62%	27.8	P2RI-6	17	4	0	1

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Central Area	Total Extractable Hydrocarbons [1]	4	3	75.00%	0.99	GW-A	0	0	0	1
	C5-C8, Aliphatic, Adjusted [2]	24	1	4.17%	0.176	GW-A	0	0	1	0.7
	C9-C10, Aromatic, Adjusted [2]	24	2	8.33%	0.0231	P2RI-41D	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	24	0	0.00%	0	--	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	4	2	50.00%	0.99	GW-A	0	0	0	1
	C11-C22, Aromatic, Adjusted [1]	4	0	0.00%	0	--	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	4	1	25.00%	0.054	GW-A	0	0	0	1
	Total Purgeable Hydrocarbon [2]	24	2	8.33%	0.247	GW-A	0	0	0	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-9A. NORTHWEST AREA, INORGANIC STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northwest Area	Antimony, Total [1]	50	1	2.00%	0.00056	P2RI-5	0	0	0	0.006
	Arsenic, Total [1]	50	30	60.00%	0.114	GW-CS	20	8	0	0.01
	Barium, Total [2]	50	50	100.00%	1.06	P2RI-11S	1	1	0	1
	Beryllium, Total [1]	50	25	50.00%	0.0072	GW-CS	2	2	0	0.004
	Cadmium, Total [2]	50	10	20.00%	0.0178	GW-CS	1	1	9	0.005
	Chromium, Total [2]	50	39	78.00%	0.184	GW-CS	4	3	0	0.1
	Cobalt, Total [2]	50	48	96.00%	0.245	P2RI-5	45	13	2	0.0047
	Copper, Total [2]	50	48	96.00%	0.206	GW-CS	0	0	0	1.3
	Cyanide, Total [4]	47	0	0.00%	0	--	0	0	0	0.2
	Lead, Total [2]	50	21	42.00%	0.0807	GW-CS	12	7	9	0.015
	Mercury, Total [3]	50	16	32.00%	0.00016	GW-CS	0	0	0	0.002
	Nickel, Total [1]	50	50	100.00%	0.722	P2RI-5	19	7	0	0.1
	Selenium, Total [1]	50	44	88.00%	0.426	P2RI-5	22	5	0	0.05
	Silver, Total [1]	50	7	14.00%	0.0019	GW-C-46S	0	0	0	0.1
	Vanadium, Total [2]	50	29	58.00%	0.369	GW-CS	8	5	0	0.063
	Zinc, Total [2]	50	47	94.00%	0.816	GW-CS	0	0	0	2

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northwest Area	Antimony, Total [1]	15	4	26.67%	0.0119	P2RI-56DF	1	1	0	0.006
	Arsenic, Total [1]	15	11	73.33%	1.37	GW-C-46DF	6	5	0	0.01
	Barium, Total [2]	15	15	100.00%	5.9	P2RI-52DF	4	4	0	1
	Beryllium, Total [1]	15	6	40.00%	0.0735	GW-C-46DF	5	5	0	0.004
	Cadmium, Total [2]	15	7	46.67%	0.0415	P2RI-46DFU	4	4	1	0.005
	Chromium, Total [2]	15	9	60.00%	1.41	GW-C-46DF	5	5	0	0.1
	Cobalt, Total [2]	15	15	100.00%	0.82	GW-C-46DF	12	7	0	0.0047
	Copper, Total [2]	15	13	86.67%	1.7	GW-C-46DF	1	1	0	1.3
	Cyanide, Total [4]	15	1	6.67%	0.012	GW-C-46DF	0	0	0	0.2
	Lead, Total [2]	15	12	80.00%	1.14	GW-C-46DF	7	6	0	0.015
	Mercury, Total [3]	15	4	26.67%	0.0049	P2RI-52DF	2	2	0	0.002
	Nickel, Total [1]	15	13	86.67%	2.31	GW-C-46DF	7	5	0	0.1
	Selenium, Total [1]	15	7	46.67%	0.0454	Multiple Locations	0	0	0	0.05
	Silver, Total [1]	15	5	33.33%	0.0136	GW-C-46DF	0	0	0	0.1
	Vanadium, Total [2]	15	14	93.33%	2.37	GW-C-46DF	6	5	0	0.063
	Zinc, Total [2]	15	15	100.00%	7.04	GW-C-46DF	3	3	0	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-9B. NORTHWEST AREA, VOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northwest Area	Benzene	59	25	42.37%	0.4	P2RI-5	25	6	0	0.005
	1,3-Butadiene	59	1	1.69%	0.075	P2RI-5	1	1	52	0.000016
	2-Butanone	59	4	6.78%	0.071	GW-C-47S	0	0	0	4.9
	n-Butylbenzene	59	13	22.03%	0.023	GW-C-47S	0	0	0	0.78
	sec-Butylbenzene	59	12	20.34%	0.016	GW-C-47S	0	0	0	1.6
	tert-Butylbenzene	59	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	59	4	6.78%	0.0028	GW-C-46S	0	0	0	0.72
	Chlorobenzene	59	0	0.00%	0	--	0	0	0	0.1
	Chloroform	61	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	59	29	49.15%	0.4	GW-C-47S	0	0	0	13
	1,2-Dibromoethane	59	0	0.00%	0	--	0	0	59	0.000004
	1,1-Dichloroethane	59	0	0.00%	0	--	0	0	1	0.0024
	1,2-Dichloroethane	59	3	5.08%	0.019	P2RI-5	3	1	1	0.004
	Ethylbenzene	59	22	37.29%	0.18	GW-C-47S	0	0	0	0.7
	n-Hexane	59	21	35.59%	0.34	GW-C-47S	2	1	0	0.25
	Isopropylbenzene	59	17	28.81%	0.037	GW-C-47S	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	59	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	59	15	25.42%	0.041	GW-C-47S	0	0	0	0.53
	Styrene	59	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	59	0	0.00%	0	--	0	0	0	0.005
	Toluene	59	25	42.37%	0.73	GW-C-47S	0	0	0	1
	1,1,1-Trichloroethane	59	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	59	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	59	21	35.59%	0.35	GW-C-47S	11	4	0	0.015
	1,3,5-Trimethylbenzene	59	22	37.29%	0.14	GW-C-47S	2	1	0	0.087
	m,p-Xylene	59	26	44.07%	0.88	GW-C-47S	0	0	0	10
	o-Xylene	59	25	42.37%	0.32	GW-C-47S	0	0	0	10
	Xylene (Total)	59	26	44.07%	1.2	Multiple Locations	0	0	0	10

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northwest Area	Benzene	44	39	88.64%	0.14	GW-MDF	15	5	0	0.005
	1,3-Butadiene	44	0	0.00%	0	--	0	0	38	0.000016
	2-Butanone	44	28	63.64%	0.073	P2RI-52DF	0	0	0	4.9
	n-Butylbenzene	44	9	20.45%	0.0037	GW-MDF	0	0	0	0.78
	sec-Butylbenzene	44	12	27.27%	0.0065	P2RI-46D	0	0	0	1.6
	tert-Butylbenzene	44	0	0.00%	0	--	0	0	0	0.51
	Carbon Disulfide	44	17	38.64%	0.021	P2RI-47DF	0	0	0	0.72
	Chlorobenzene	44	0	0.00%	0	--	0	0	0	0.1
	Chloroform	45	0	0.00%	0	--	0	0	0	0.07
	Cyclohexane	44	33	75.00%	0.3	Multiple Locations	0	0	0	13
	1,2-Dibromoethane	44	0	0.00%	0	--	0	0	44	0.000004
	1,1-Dichloroethane	44	0	0.00%	0	--	0	0	0	0.0024
	1,2-Dichloroethane	44	2	4.55%	0.0003	P2RI-45D	0	0	0	0.004
	Ethylbenzene	44	33	75.00%	0.057	GW-MDF	0	0	0	0.7
	n-Hexane	44	29	65.91%	0.36	P2RI-46D	2	2	0	0.25
	Isopropylbenzene	44	16	36.36%	0.017	GW-MDF	0	0	0	0.39
	Methyl Tertiary Butyl Ether (MTBE)	44	0	0.00%	0	--	0	0	0	0.03
	n-Propylbenzene	44	16	36.36%	0.017	GW-MDF	0	0	0	0.53
	Styrene	44	0	0.00%	0	--	0	0	0	0.1
	Tetrachloroethene	44	0	0.00%	0	--	0	0	0	0.005
	Toluene	44	39	88.64%	0.19	P2RI-56DF	0	0	0	1
	1,1,1-Trichloroethane	44	0	0.00%	0	--	0	0	0	0.2
	Trichloroethene	44	0	0.00%	0	--	0	0	0	0.005
	1,2,4-Trimethylbenzene	44	25	56.82%	0.094	P2RI-56DF	5	4	0	0.015
	1,3,5-Trimethylbenzene	44	19	43.18%	0.064	P2RI-56DF	0	0	0	0.087
	m,p-Xylene	44	36	81.82%	0.24	P2RI-56DF	0	0	0	10
	o-Xylene	44	32	72.73%	0.4	P2RI-56DF	0	0	0	10
	Xylene (Total)	44	36	81.82%	0.64	P2RI-56DF	0	0	0	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-9C. NORTHWEST AREA, SVOCs STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northwest Area	Acenaphthene [1]	51	0	0.00%	0	--	0	0	0	0.67
	Anthracene [1]	51	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	51	0	0.00%	0	--	0	0	3	0.013
	Benzo(a)anthracene [2]	50	3	6.00%	0.000054	GW-C-47S	0	0	1	0.0005
	Benzo(a)pyrene [2]	50	2	4.00%	0.00013	P2RI-5	1	1	5	0.00005
	Benzo(b)fluoranthene [2]	50	5	10.00%	0.000033	P2RI-47S	0	0	1	0.0005
	Benzo(k)fluoranthene [1]	51	0	0.00%	0	--	0	0	3	0.005
	Bis(2-Ethylhexyl)phthalate [1]	51	2	3.92%	0.006	P2RI-11S	0	0	3	0.006
	Chrysene [1]	51	0	0.00%	0	--	0	0	0	0.05
	Dibenz(a,h)acridine [1]	51	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	50	0	0.00%	0	--	0	0	5	0.00005
	1,2-Dichlorobenzene [1]	51	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	51	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	51	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	51	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	51	2	3.92%	0.002	P2RI-5S	0	0	0	0.38
	Dimethylphthalate [1]	51	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	51	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	51	0	0.00%	0	--	0	0	3	0.069
	1,4-Dioxane [1]	51	0	0.00%	0	--	0	0	51	0.00067
	Fluoranthene [1]	51	0	0.00%	0	--	0	0	0	0.13
	Fluorene [1]	51	0	0.00%	0	--	0	0	0	1.1
	Indene [1]	51	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	50	0	0.00%	0	--	0	0	1	0.0005
	1-Methylnaphthalene [2]	49	40	81.63%	0.17	GW-C-47S	12	4	1	0.00097
	2-Methylnaphthalene [1]	51	9	17.65%	0.29	GW-C-47S	3	2	0	0.027
	2-Methylphenol [1]	51	3	5.88%	0.01	GW-C-47S	0	0	0	0.72
	4-Methylphenol [1]	51	2	3.92%	0.003	GW-C-47S	0	0	0	1.4
	Naphthalene [2]	49	36	73.47%	0.11	GW-C-47S	1	1	0	0.1
	4-Nitrophenol [1]	51	0	0.00%	0	--	0	0	3	0.06
	Phenanthrene [1]	51	0	0.00%	0	--	0	0	0	NA
	Phenol [1]	51	2	3.92%	0.028	GW-C-47S	0	0	0	0.3
	Pyrene [1]	51	0	0.00%	0	--	0	0	0	0.83
	Pyridine [1]	51	2	3.92%	0.005	Multiple Locations	0	0	3	0.015
	Tetraethyl Lead [1]	50	0	0.00%	0	--	0	0	50	0.00000099
	Tetramethyl Lead (TML) [1]	3	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	51	0	0.00%	0	--	0	0	51	0.000021

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northwest Area	Acenaphthene [1]	34	4	11.76%	0.001	Multiple Locations	0	0	0	0.67
	Anthracene [1]	34	0	0.00%	0	--	0	0	0	2.1
	Benzenethiol (Thiophenol) [1]	34	0	0.00%	0	--	0	0	15	0.013
	Benzo(a)anthracene [2]	32	8	25.00%	0.0013	GW-C-46DF	3	3	9	0.0005
	Benzo(a)pyrene [2]	32	6	18.75%	0.002	GW-MDF	4	4	12	0.00005
	Benzo(b)fluoranthene [2]	32	11	34.38%	0.002	GW-MDF	3	3	9	0.0005
	Benzo(k)fluoranthene [1]	34	0	0.00%	0	--	0	0	6	0.005
	Bis(2-Ethylhexyl)phthalate [1]	34	12	35.29%	0.58	GW-MDF	9	7	6	0.006
	Chrysene [1]	34	2	5.88%	0.002	Multiple Locations	0	0	0	0.05
	Dibenz(a,h)acridine [1]	34	0	0.00%	0	--	0	0	0	NA
	Dibenz(a,h)anthracene [2]	32	2	6.25%	0.00044	GW-C-46DF	2	2	14	0.00005
	1,2-Dichlorobenzene [1]	34	0	0.00%	0	--	0	0	0	0.6
	1,3-Dichlorobenzene [1]	34	0	0.00%	0	--	0	0	0	0.6
	1,4-Dichlorobenzene [1]	34	0	0.00%	0	--	0	0	0	0.075
	Diethylphthalate [1]	34	0	0.00%	0	--	0	0	0	17
	2,4-Dimethylphenol [1]	34	8	23.53%	0.034	P2RI-46DFU	0	0	0	0.38
	Dimethylphthalate [1]	34	0	0.00%	0	--	0	0	0	270
	Di-n-butylphthalate [1]	34	0	0.00%	0	--	0	0	0	2
	2,4-Dinitrophenol [1]	34	0	0.00%	0	--	0	0	13	0.069
	1,4-Dioxane [1]	34	0	0.00%	0	--	0	0	34	0.00067
	Fluoranthene [1]	34	3	8.82%	0.002	GW-MDF	0	0	0	0.13
	Fluorene [1]	34	5	14.71%	0.015	P2RI-46DFU	0	0	0	1.1
	Indene [1]	34	0	0.00%	0	--	0	0	0	NA
	Indeno(1,2,3-cd)pyrene [2]	32	2	6.25%	0.00074	GW-C-46DF	1	1	10	0.0005
	1-Methylnaphthalene [2]	34	28	82.35%	0.098	GW-MDF	16	9	3	0.00097
	2-Methylnaphthalene [1]	34	18	52.94%	0.13	Multiple Locations	4	4	0	0.027
	2-Methylphenol [1]	34	5	14.71%	0.037	P2RI-56DF	0	0	0	0.72
	4-Methylphenol [1]	34	6	17.65%	0.014	GW-C-47DF	0	0	0	1.4
	Naphthalene [2]	34	27	79.41%	0.12	GW-MDF	2	2	0	0.1
	4-Nitrophenol [1]	34	0	0.00%	0	--	0	0	13	0.06
	Phenanthrene [1]	34	9	26.47%	0.023	P2RI-46DFU	0	0	0	NA
	Phenol [1]	34	3	8.82%	0.009	GW-C-47DF	0	0	0	0.3
	Pyrene [1]	34	7	20.59%	0.013	P2RI-46DFU	0	0	0	0.83
	Pyridine [1]	34	0	0.00%	0	--	0	0	13	0.015
	Tetraethyl Lead [1]	18	0	0.00%	0	--	0	0	18	0.00000099
	Tetramethyl Lead (TML) [1]	2	0	0.00%	0	--	0	0	0	NA
	Quinoline [1]	34	0	0.00%	0	--	0	0	34	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.6-9D. NORTHWEST AREA, EPH-VPH STATISTICAL EVALUATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Weathered Shale Wells - Northwest Area	Total Extractable Hydrocarbons [1]	19	18	94.74%	15	GW-C-47S	6	3	0	1
	C5-C8, Aliphatic, Adjusted [2]	58	17	29.31%	7.25	GW-C-47S	11	5	0	0.7
	C9-C10, Aromatic, Adjusted [2]	58	17	29.31%	1.76	GW-C-47S	4	2	0	1
	C9-C12, Aliphatic, Adjusted [2]	58	9	15.52%	0.858	GW-C-47S	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	19	18	94.74%	14	GW-C-47S	6	3	0	1
	C11-C22, Aromatic, Adjusted [1]	19	10	52.63%	1.2	GW-C-47S	1	1	0	1
	C19-C36, Aliphatic, Adjusted [1]	19	3	15.79%	0.14	P2RI-5S	0	0	0	1
	Total Purgeable Hydrocarbon [2]	58	20	34.48%	12.2	GW-C-47S	13	5	0	1

	Analyte	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Groundwater Standard or RBSL Exceedances	Number of Monitoring Wells with Exceedances	Detection Limit Exceedances	Groundwater Standard or RBSL (mg/L)
Competent Shale Wells - Northwest Area	Total Extractable Hydrocarbons [1]	8	8	100.00%	8.8	P2RI-46DFU	4	3	0	1
	C5-C8, Aliphatic, Adjusted [2]	44	20	45.45%	4.2	P2RI-56DF	12	4	0	0.7
	C9-C10, Aromatic, Adjusted [2]	44	19	43.18%	0.968	P2RI-56DF	0	0	0	1
	C9-C12, Aliphatic, Adjusted [2]	44	15	34.09%	0.479	GW-C-47DF	0	0	0	1
	C9-C18, Aliphatic, Adjusted [1]	8	8	100.00%	7.1	P2RI-46DFU	3	2	0	1
	C11-C22, Aromatic, Adjusted [1]	8	2	25.00%	0.86	P2RI-46DFU	0	0	0	1
	C19-C36, Aliphatic, Adjusted [1]	8	2	25.00%	1.4	P2RI-46DFL	1	1	0	1
	Total Purgeable Hydrocarbon [2]	44	21	47.73%	5.96	P2RI-56DF	12	4	0	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Not Detected

TABLE 4.7-1. DATA SUMMARY, SOIL SAMPLES COLLECTED DURING INSTALLATION OF MONITORING WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact SL Exceedances	MTGW SL Exceedances	Site-Specific Background Value Exceedances	Direct Contact SLs (mg/kg)	MTGW SLs (mg/kg)	Site-Specific Background Values (mg/kg)
Antimony, Total	117	26	22.22%	1.96 J	P2RI-34S (20-21 ft)	0	0	117	3.1	2.7	0.368
Arsenic, Total	117	117	100.00%	35 J	P2RI-15 (5-10 ft)	117	117	10	0.61	2.9	25.1
Barium, Total	117	117	100.00%	1260	P2RI-45E (13-14 ft)	0	13	17	1500	414	392
Beryllium, Total	117	117	100.00%	1.53	P2RI-38S (13-14 ft)	0	0	74	16	32	0.817
Cadmium, Total	117	96	82.05%	3.17	GW-MS (14-15 ft)	0	0	10	7	3.8	1.17
Chromium, Total	117	117	100.00%	40.4 J	P2RI-36DF (117-118 ft)	0	0	7	12000	1800000	30.8
Cobalt, Total	117	117	100.00%	14.4	P2RI-5S (11-12 ft)	117	117	31	2.3	2.1	9.13
Copper, Total	117	117	100.00%	37.8	P2RI-36DF (117-118 ft)	0	0	3	310	460	26.6
Cyanide, Total	117	0	0.00%	--		0	0	0	4.7	20	NA
Lead, Total	117	117	100.00%	35.3 J	GW-CDF (109-110 ft)	0	0	2	400	140	30.2
Mercury, Total	117	115	98.29%	0.175	P2RI-16S (13-16 ft)	0	0	6	2.3	NA	0.0837
Nickel, Total	117	117	100.00%	53.5 J	P2RI-36DF (117-118 ft)	0	0	22	150	147	32.6
Selenium, Total	117	58	49.57%	10.6	GW-MS (14-15 ft)	0	7	11	39	2.6	2.09
Silver, Total	117	47	40.17%	1.19	GW-MS (14-15 ft), P2RI-23D (22.4-22.8 ft)	0	0	109	39	6	0.168
Vanadium, Total	117	117	100.00%	107 J	P2RI-36DF (117-118 ft)	92	0	46	39	780	63.9
Zinc, Total	117	117	100.00%	167	P2RI-41S (14-15 ft)	0	0	13	2300	2900	119

Volatile Organic Compounds	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs (Subsurface Soil) (mg/kg)
Benzene	117	60	51.28%	2.53	P2RI-6 (24-27 ft)	0	16	200	0.04
2-Butanone	117	10	8.55%	0.0471	GW-ES (12-16 ft)	0	0	2800	10
n-Butylbenzene	97	17	17.53%	0.962	P2RI-43S (23-25 ft)	0	0	390	2.5
sec-Butylbenzene	96	20	20.83%	0.8	P2RI-45E (13-14 ft)	0	0	780	4.6
tert-Butylbenzene	95	5	5.26%	0.015	P2RI-32S (7-10 ft)	0	0	780	1.1
Carbon Disulfide	116	12	10.34%	0.0409	P2RI-36DF (117-118 ft)	0	0	82	2.1
Chlorobenzene	109	0	0.00%	--		0	0	29	0.68
Chloroform	115	1	0.87%	0.00112 JB	GW-C-48 (27 ft)	0	0	0.29	0.2
Cyclohexane	117	48	41.03%	12.5	P2RI-4S (12-15 ft)	0	0	700	130
1,2-Dibromoethane	109	0	0.00%	--		0	109	7	0.00002
1,1-Dichloroethane	115	0	0.00%	--		0	15	3.3	0.0068
1,2-Dichloroethane	115	2	1.74%	0.00675	GW-C-48 (27 ft)	0	15	104	0.01
Ethylbenzene	117	45	38.46%	5.9	P2RI-4S (12-15 ft)	0	0	1000	10
Hexane	117	54	46.15%	29.5	P2RI-4S (12-15 ft)	0	1	57	18
Isopropylbenzene	111	21	18.92%	1.93	P2RI-4S (12-15 ft)	0	0	210	6.4
MTBE	115	0	0.00%	--		0	0	8000	0.08
n-Propylbenzene	106	30	28.30%	2.27	P2RI-4S (12-15 ft)	0	0	340	9.9
Styrene	110	1	0.91%	0.00332 J	P2RI-36DF (117-118 ft)	0	0	630	1.1
Tetrachloroethene	109	0	0.00%	--		0	15	8.6	0.023
Toluene	117	60	51.28%	13.3	P2RI-6 (24-27 ft)	0	1	5000	10
1,1,1-Trichloroethane	115	0	0.00%	--		0	0	870	0.7
Trichloroethene	115	0	0.00%	--		0	15	0.44	0.018
1,2,4-Trimethylbenzene	114	40	35.09%	8.97	P2RI-4S (12-15 ft)	4	16	6.2	0.21
1,3,5-Trimethylbenzene	114	39	34.21%	4.65	P2RI-4S (12-15 ft)	0	8	78	1.2
m,p-Xylene	117	55	47.01%	25	P2RI-4S (12-15 ft)	0	0	59	94.74
o-Xylene	117	41	35.04%	8.85	P2RI-4S (12-15 ft)	0	0	69	100
Xylenes, Total	117	55	47.01%	34.1	P2RI-4S (12-15 ft)	0	0	600	200

TABLE 4.7-1. DATA SUMMARY, SOIL SAMPLES COLLECTED DURING INSTALLATION OF MONITORING WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs (Subsurface Soil) (mg/kg)
Acenaphthene	117	7	5.98%	0.133 J	P2RI-36DF (117-118 ft)	0	0	4000	200
Anthracene	117	2	1.71%	0.091 J	P2RI-32S (7-10 ft)	0	0	20000	4000
Benzo(a)anthracene	117	4	3.42%	0.068	P2RI-30S (5-6 ft)	0	0	50	10
Benzo(a)pyrene	116	40	34.48%	0.0454 J	P2RI-36DF (117-118 ft)	0	0	5	4
Benzo(b)fluoranthene	116	5	4.31%	0.0498 J	P2RI-36DF (117-118 ft)	0	0	50	50
Benzo(k)fluoranthene	116	1	0.86%	0.0066 J	P2RI-55S (27-29 ft)	0	0	500	500
Bis(2-ethylhexyl)phthalate	117	5	4.27%	0.148 J	GW-20D (16.5-18.5 ft)	0	0	35	14
Chrysene	117	9	7.69%	0.25	P2RI-32S (7-10 ft)	0	0	5000	2000
Dibenz(a,h)acridine	116	0	0.00%	--		0	0	NA	NA
Dibenzo(a,h)anthracene	116	26	22.41%	0.0146 J	P2RI-11D (59-60 ft)	0	0	5	7
1,2-Dichlorobenzene	114	0	0.00%	--		0	0	190	5.8
1,3-Dichlorobenzene	114	0	0.00%	--		0	0	NA	NA
1,4-Dichlorobenzene	114	0	0.00%	--		0	0	2.4	0.72
Diethylphthalate	117	0	0.00%	--		0	0	4900	72.64
2,4-Dimethylphenol	117	3	2.56%	0.354	P2RI-36DF (117-118 ft)	0	0	120	4.5
Dimethylphthalate	117	0	0.00%	--		0	0	NA	NA
Di-n-butylphthalate	117	0	0.00%	--		0	0	610	50.75
2,4-Dinitrophenol	114	0	0.00%	--		0	14	12	0.782
1,4-Dioxane	114	0	0.00%	--		0	114	4.9	0.0014
Fluoranthene	117	6	5.13%	0.0631 J	P2RI-36DF (117-118 ft)	0	0	2000	500
Fluorene	117	14	11.97%	0.4	P2RI-32S (7-10 ft)	0	0	2000	600
Indene	114	1	0.88%	0.0841 J	P2RI-36DF (117-118 ft)	0	0	NA	NA
Indeno(1,2,3-cd)pyrene	116	3	2.59%	0.012 J	P2RI-55S (27-29 ft)	0	0	50	100
Tetraethyl Lead	117	1	0.85%	0.145 J	GW-CDF (109-110 ft)	117	117	0.00061	0.000035
1-Methylnaphthalene	117	52	44.44%	1.24	P2RI-46S (18-19 ft)	0	46	16	0.051
2-Methylnaphthalene	117	53	45.30%	2.59	P2RI-46S (18-19 ft)	0	1	23	1.4
2-Methylphenol	114	1	0.88%	0.21	P2RI-36DF (117-118 ft)	0	0	310	5.8
4-Methylphenol	114	1	0.88%	0.476	P2RI-36DF (117-118 ft)	0	0	610	11
Naphthalene	117	53	45.30%	3.04	P2RI-46S (18-19 ft)	0	0	200	9
4-Nitrophenol	117	0	0.00%	--		0	0	NA	NA
Phenanthrene	117	35	29.91%	1.1	P2RI-32S (7-10 ft)	0	0	NA	NA
Phenol	115	5	4.35%	0.653	P2RI-36DF (117-118 ft)	0	0	1800	1.73
Pyrene	117	15	12.82%	0.29	P2RI-32S (7-10 ft)	0	0	2000	4000
Pyridine	114	0	0.00%	--		0	114	7.8	0.053
Quinoline	117	0	0.00%	--		1	117	0.16	0.00068
Thiophenol	113	0	0.00%	--		0	113	7.8	0.086

TABLE 4.7-1. DATA SUMMARY, SOIL SAMPLES COLLECTED DURING INSTALLATION OF MONITORING WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Carbon Fractions	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration	Direct Contact (Subsurface Soil) SL Exceedances	MTGW SL (Subsurface Soil) Exceedances	Direct Contact (Subsurface Soil) SLs (mg/kg)	MTGW SLs (Subsurface Soil) (mg/kg)
C5-C8, Aliphatic, Adjusted	117	51	43.59%	1660 J	P2RI-4S (12-15 ft)	2	3	500	200
C9-C10, Aromatic, Adjusted	117	41	35.04%	153 J	P2RI-32S (7-10 ft)	0	6	1000	100
C9-C12, Aliphatic, Adjusted	117	43	36.75%	379 J	P2RI-4S (12-15 ft)	0	0	1000	10000
C9-C18, Aliphatic, Adjusted	7	7	5.98%	1200	P2RI-31S (9.5-10.5 ft)	0	0	2000	50000
C11-C22, Aromatic, Adjusted	7	7	5.98%	770 J	P2RI-31S (9.5-10.5 ft)	0	2	4000	400
C19-C36, Aliphatic, Adjusted	7	6	5.13%	1800	P2RI-31S (9.5-10.5 ft)	0	0	100000	NA
Total Extractable Hydrocarbons[1]	117	14	11.97%	3800 J	P2RI-31S (9.5-10.5 ft)	0	0	NA	NA

Notes:

[1] - Samples analyzed for Total Extractable Hydrocarbons are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of Total Extractable Hydrocarbon samples.

ft-bgs - feet below ground surface

J - estimated concentration

JB – Estimated concentration due to blank contamination

mg/kg - milligrams per kilogram

MTGW - migration to groundwater

NA - not available

SL - screening level determined via MDEQ flowchart procedures

surface soil / subsurface soil: "surface soil" is defined as a sample collected at a depth of 2 ft-bgs or shallower; samples collected from greater depths are defined as "subsurface soil"

T.E.H. - total extractable hydrocarbons

-- not applicable

TABLE 4.7-2. ANALYTICAL RESULTS, INORGANICS, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Antimony, Total (mg/kg)	Arsenic, Total (mg/kg)	Barium, Total (mg/kg)	Beryllium, Total (mg/kg)	Cadmium, Total (mg/kg)	Chromium, Total (mg/kg)	Cobalt, Total (mg/kg)	Copper, Total (mg/kg)	Cyanide, Total (mg/kg)	Lead, Total (mg/kg)	Mercury, Total (mg/kg)	Nickel, Total (mg/kg)	Selenium, Total (mg/kg)	Silver, Total (mg/kg)	Vanadium, Total (mg/kg)	Zinc, Total (mg/kg)
GW-4R	10/31/11	10	11	ND(0.741) UJ	9.17 J	247 J	0.694	0.473 J	18.5 J	8.54	17.2	ND(0.21)	9.63 J	0.029 JB	21	ND(0.764)	0.215 JB	34.2 J	68.7
GW-16R	10/11/10	8.5	9.5	ND(1.12)	8.2	200	0.591	1.07	15.6 J	6.03 J	13.4	ND(0.193)	8.25	ND(0.00306)	17.6	1.26 J	ND(0.202)	32.2 J	60.7
GW-17R	10/31/11	9	10	ND(0.749) UJ	7.07	228 J	0.639	0.216 J	16.4 J	6.69	18.1	ND(0.2)	11.1 J	0.0401 JB	20.1	ND(0.772)	0.19 JB	30.1 J	64.9
GW-20D	10/20/10	16.5	18.5	ND(1.14)	13.4	292	0.831	0.564 J	24.8	7.75	21	ND(0.193)	14.6	0.0451 JB	28.1	ND(1.11)	0.552 J	66	97.3
GW-20RS Dup	10/20/10	8	11.5	ND(1.1)	6.52 J	231	0.61	0.659	17	5.24	13.2	ND(0.193)	9.21	0.049 JB	15.2	ND(1.08)	0.463 J	36.3	54.5
GW-20RS	10/20/10	8	11.5	ND(1.12)	15 J	245	0.621	0.773	17.6	6.76	14.2	ND(0.195)	10.8	0.0515 JB	18.9	ND(1.1)	0.504 J	37.3	57.6
GW-A	11/06/10	60	60	ND(1.03) UJ	14.3 J	369 J	1.04	0.158 J	26.5 J	8.19	18.2 J	ND(0.19)	24	0.0359 J	27.3	ND(1.01)	0.812	83.5 J	101
GW-C-25	11/07/10	39	39	ND(1.01) UJ	12.4 J	294 J	0.935	ND(0.142)	24.3 J	10.3	18.1 J	ND(0.181)	17.2	0.0483 J	29.1	ND(0.994)	0.649	54.7 J	114
GW-C-46S	09/29/10	24	25	ND(1.07)	11.6 J	339 J	1.09	0.976	29.7	7.8	19.2	ND(0.182)	16.6	0.0368 J	26.3	1.8 J	ND(0.193)	73.5	98.7
GW-C-47S Dup	09/28/10	16	17	ND(1.09)	16.1 J	312 J	1.15	0.94	30.2	5.35	20.2	ND(0.197)	21.4	0.0364 J	25.3	1.42 J	ND(0.197)	77.7	101
GW-C-47S	09/28/10	16	17	1.3 J	13.9 J	315 J	1.18	1.03	28.6	8.29	19.4	ND(0.197)	19.9	0.0371 J	26.4	2.1	ND(0.187)	75.4	104
GW-C-48	11/06/10	27	27	ND(1.07) UJ	15.4 J	324 J	0.908	0.209 J	30.8 J	6.39	17 J	ND(0.202)	16.9	0.0933 J	26.3	ND(1.05)	0.724	84.9 J	86.6
GW-CD	11/04/10	65	66	ND(0.991)	24	237	0.923 JB	ND(0.138)	21.6	7.38	17.5	ND(0.177)	14.5	0.0354 JB	27.2	ND(0.971)	ND(0.178)	58.1	105
GW-CDF Dup	11/07/10	109	110	ND(0.987) UJ	9.64 J	289 J	0.837	0.145 J	21.1 J	9.16	17.6 J	ND(0.176)	18.2 J	0.0366 J	28.5	1.14 J	0.429 J	45.9 J	104
GW-CDF	11/07/10	109	110	ND(1.03) UJ	13.3 J	507 J	1.3	ND(0.144)	18.1 J	8.97	18.1 J	ND(0.176)	35.3 J	0.102 J	28.7	1.39 J	0.407 J	44.1 J	98
GW-CS	11/04/10	17	18	1.13 J	27.6	423	1.17 JB	ND(0.153)	27.4	11.8	23.7	ND(0.185)	19.1	0.0525 JB	40	8.96	ND(0.196)	62.6	98.8
GW-D Dup	11/05/10	49	51	ND(1.03) UJ	7.6 J	165 J	0.799	0.194 J	10.7 J	4.97	9.6 J	ND(0.19)	17.9	0.064 J	17.1	ND(1.01)	0.279 J	23.5 J	89.7
GW-D	11/05/10	49	51	ND(1.02) UJ	12.5 J	223 J	1.09	0.159 J	22.1 J	6.82	14.8 J	ND(0.189)	20.4	0.0686 J	21.6	ND(1)	0.387 J	51.6 J	103
GW-ED Dup	11/08/10	64	64	ND(1.07) UJ	15.9 J	339 J	0.968	0.212 J	28 J	8.3	24.1 J	ND(0.185)	20.7	0.0516 J	33.6	1.65 J	0.538	78 J	98.3
GW-ED	11/08/10	64	64	ND(1.07) UJ	16.4 J	320 J	0.958	0.163 J	28.6 J	7.5	23 J	ND(0.195)	16.2	0.0488 J	29.8	ND(1.05)	0.431 J	78.9 J	101
GW-ES Dup	10/14/10	12	16	1.2 J	20.6 J	286	0.996 JB	0.558	21.7	10.9	20.3	ND(0.198)	14.4	0.0415 JB	36.7	1.35 J	0.226 J	59.2	119
GW-ES	10/14/10	12	16	ND(1.09)	12.8 J	296	0.923 JB	0.555	19.3	10.1	18.9	ND(0.197)	15	0.0374 JB	32.8	ND(1.06)	ND(0.195)	52.3	105
GW-FS	09/28/10	15	16	ND(1.08)	12.1 J	155 J	0.571	0.87	13.9	5.22	12.7	ND(0.204)	8.73	0.0404 J	15.4	1.71 J	ND(0.194)	37.4	72.7
GW-GS	09/27/10	15	16	ND(1.14)	6.54 J	189 J	0.382 J	0.654	10.2	3.2	6.54	ND(0.194)	6.83 J	0.00342 J	9.52	1.78 J	ND(0.205)	21.7	29.7
GW-GS	09/29/10	8	9	1.76 J	7.95 J	265 J	0.832	1.14	21.3	6.71	16.9	ND(0.215)	9.31	0.0346 J	19.9	1.8 J	ND(0.215)	42.2	62.3
GW-K	09/10/10	39	40	1.18 J	31.8	310	1.13	0.388 J	29.2	11.6	21.7	ND(0.19)	14.6	0.0354 JB	31.4	1.22 J	ND(0.183)	87.2	118
GW-L	05/07/11	29	31	ND(1.08)	18.3	223	0.817	ND(0.151)	21.1	10.6	21.6	ND(0.2)	14.4	0.043 JB	38.5	ND(1.06)	ND(0.194)	45.6	126
GW-MS	09/28/10	14	15	ND(1.05)	20.9 J	421 J	1.37	3.17	25.3	10.6	19.5	ND(0.198)	19.8	0.038 J	39.3	10.6	1.19	88.4	98.5
GW-NS Dup	12/04/10	9	10	ND(1.14)	8.49	248	0.542 J	0.47 J	18.5	5.59	13	ND(0.208)	8.28	0.00935 JB	17.6	ND(1.12)	ND(0.206)	36.6	64.2
GW-NS	12/04/10	9	10	ND(1.15)	9.09	234	0.559 J	0.472 J	18.6	5.79	14.5	ND(0.198)	8.61	0.0126 JB	17.6	ND(1.13)	0.252 JB	35.4	64.1
P2RI-1D	01/10/10	20	21	ND(1.1)	21.4	195	0.855	1.17	25.5	9.98	27	ND(0.189)	12.1	0.0426 J	47.5	2.83	0.327 J	61.3	114
P2RI-1D	01/10/10	51	52	ND(1.05)	20.8	130	0.934	1.27	22.3	8.01	20.7	ND(0.195)	12.1	0.0433 J	30.9	1.72 J	0.318 J	56.9	55.9
P2RI-3D	01/09/10	79	81	ND(1.02)	27.6	435	0.926	1.09	25.8	8.88	24.7	ND(0.19)	10.5	0.0411 J	33.8	1.43 J	0.308 J	65.9	150
P2RI-3S	12/20/09	16	18	ND(1.11)	12.3 J	365 J	1.09	0.799 J	33.3 J	8.91 J	24 J	ND(0.2)	16.3 J	0.0488 J	31.5 J	1.5 J	0.323 J	86 J	128 J
P2RI-4S	12/16/09	21	25	ND(1.1)	12.1 J	314 J	1.06	ND(0.154)	27.2 J	10.5	17.5	ND(0.204)	11.5 J	0.0796 J	28.7	1.58 J	ND(0.199)	65.2 J	113 J
P2RI-4D	01/11/10	34	36	ND(1.06)	12.9	391	0.899	0.911	21.1	9.41	16.3	ND(0.183)	15.5	0.0631 JB	27.1	ND(1.04)	0.224 J	45.4	107
P2RI-5S	05/06/11	11	12	ND(1.11)	16.7	286	0.831	ND(0.156)	20.7	14.4	20.4	ND(0.2)	18.3	0.0275 JB	33.3	ND(1.09)	ND(0.2)	39.8	110
P2RI-6	12/16/09	24	27	ND(1.18)	15.3 J	297 J	1.06	ND(0.165)	29.6 J	5.98	13.6	ND(0.217)	21.2 J	0.0591 J	21.7	1.51 J	ND(0.212)	77.3 J	101 J
P2RI-8	12/17/09	33	33	ND(1.02) UJ	17	213	0.855	ND(0.143)	25.1 J	7.49 J	16.6	ND(0.181)	14.4	0.0632 J	28.2	ND(1.01)	ND(0.186)	66.6	102
P2RI-9D	01/24/10	50	53	1.17 J	21	286 J	0.975 JB	0.219 J	25.7 J	6.91	19.4	ND(0.192)	16.8	0.0395 J	28	1.7 J	ND(0.19)	65.2 J	104
P2RI-9S Dup	12/20/09	15	16	ND(1.17)	10.5 J	411 J	0.419 J	0.971 J	15.9 J	6.33 J	14.2 J	ND(0.211)	9.49 J	0.0357 J	20.4 J	1.47 J	0.322 J	34.7 J	57.8 J
P2RI-9S	12/20/09	15	16	ND(1.17)	8.25 J	219 J	0.401 J	0.543 J	11.3 J	3.44 J	10 J	ND(0.201)	7.94 J	0.0418 J	11.1 J	ND(1.15)	ND(0.211)	28.9 J	70.4 J
P2RI-9S	12/20/09	24	26	ND(1.29)	23.6 J	360 J	0.96	1.18 J	25.4 J	5.16 J	22.7 J	ND(0.232)	21.8 J	0.0745 J	17 J	2.01 J	0.468 J	61.9 J	114 J
P2RI-10D	01/20/10	67	72	ND(1.04) UJ	12.8 J	343 J	1.01	1.21	30.2 J	8.7	21.1	ND(0.177)	19.8 J	0.0556 J	33.1	2.04 J	0.449 JB	83.7 J	105
P2RI-10S	01/11/10	14	16	ND(1.1)	14	275	0.812	1.08	18.5	8.17	13.6	ND(0.202)	8.59	0.0575 J	24	ND(1.08)	0.276 J	43.6	87.6
P2RI-11D	01/10/10	59	60	ND(1.01)	31.1	303	0.782	1.29	25	8.06	17.7	ND(0.188)	6.47	0.0186 J	28.8	1.19 J	0.303 J	55.9	106
P2RI-11S	01/09/10	9	9	ND(1.11)	11.8	316	1.08	0.812	28.8	6.17	19.1	ND(0.202)	13.1	0.0355 J	27.9	ND(1.09)	ND(0.199)	69.4	128
P2RI-11S	01/09/10	19	19	ND(1.06)	18.2	455	0.874	1.15	21.5	7.4	14.6	ND(0.199)	7.64	0.11	23.5	ND(1.04)	0.251 J	55.1	136
P2RI-12	01/19/10	7	12	ND(1.15) UJ	7.64 J	481 J	1.19	1.03	24.6 J	9.03	18.4	ND(0.207)	9.11 J	0.0415 J	29.1	1.42 J	0.4 JB	60.4 J	113
P2RI-13 Dup	01/12/10	22	24	1.1 J	31 J	396 J	1	ND(0.152)	31.5 J	8.92	19.3 J	ND(0.184)	15.4 J	0.0685 J	31.4	ND(1.06)	ND(0.195)	90.6 J	128 J
P2RI-13	01/12/10	22	24	ND(1.1)	22.9 J	266 J	0.888	ND(0.153)	27.4 J	6.73	14.8 J	ND(0.197)	20.8 J	0.0584 J	23.8	ND(1.07)	ND(0.197)	81.4 J	93.1 J

TABLE 4.7-2. ANALYTICAL RESULTS, INORGANICS, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Antimony, Total (mg/kg)	Arsenic, Total (mg/kg)	Barium, Total (mg/kg)	Beryllium, Total (mg/kg)	Cadmium, Total (mg/kg)	Chromium, Total (mg/kg)	Cobalt, Total (mg/kg)	Copper, Total (mg/kg)	Cyanide, Total (mg/kg)	Lead, Total (mg/kg)	Mercury, Total (mg/kg)	Nickel, Total (mg/kg)	Selenium, Total (mg/kg)	Silver, Total (mg/kg)	Vanadium, Total (mg/kg)	Zinc, Total (mg/kg)
P2RI-14	12/19/09	13	16	ND(1.11) UJ	15.4 J	291 J	0.96	ND(0.155)	28.1 J	10.5	21	ND(0.188)	16	0.0414 J	32.7	ND(1.09)	ND(0.199)	76.1 J	123
P2RI-15	01/19/10	5	10	ND(1.08) UJ	35 J	410 J	1.17	1.35	28.1 J	14.3	18.4	ND(0.186)	14.9 J	0.0725 J	30.6	1.68 J	0.4 JB	87.3 J	109
P2RI-16D	10/27/10	18	19	ND(1.08)	9.8	249	0.823	0.608	26.8	6.93	18.4	ND(0.201) UJ	15.3	0.0518 J	25.5	ND(1.06)	ND(0.974)	66.9	89.4
P2RI-16S	12/19/09	13	16	ND(1.12)	10.6 J	252 J	0.809	0.795 J	24.9 J	6.88 J	14.5 J	ND(0.202)	16.7 J	0.175	21.8 J	ND(1.1)	0.267 J	68.2 J	84.1 J
P2RI-17	12/19/09	12	13	ND(1.11)	7.54 J	396 J	1.13	0.809 J	29.2 J	8.08 J	17.9 J	ND(0.195)	16.9 J	0.0481 J	26.3 J	ND(1.09)	0.344 J	73.8 J	101 J
P2RI-18	12/21/09	11	12	ND(1.13)	7.76 J	231 J	0.578	0.777 J	16.9 J	6.23 J	12.7 J	ND(0.21)	9.96 J	0.0266 J	16.2 J	ND(1.11)	0.308 J	35.7 J	62.5 J
P2RI-18D	10/11/10	15.5	16.5	ND(1.16)	9.54	320	1.05	1.19	24.8 J	8.8 J	22.1	ND(0.212)	15.3	0.0101 JB	30.1	1.5 J	0.425 J	60.1 J	108
P2RI-18SR	10/11/10	9	10	ND(1.15)	9.01	237	0.629	0.954	14.4 J	5.5 J	14.7	ND(0.195)	9.31	0.0137 JB	16.7	1.6 J	ND(0.206)	35.3 J	71.6
P2RI-19D	10/26/10	22.5	22.5	ND(1.14)	13.2	295	1.06 JB	ND(0.159)	24.8	10.4	25.5	ND(0.209) UJ	13.2	0.063 J	38.6	1.38 J	1.11	57.9	111
P2RI-19S	12/18/09	9.5	10.5	ND(1.24) UJ	7.92	259	0.734	0.349 J	20 J	7.95 J	15.2	ND(0.228)	8.81	0.0317 J	20.5	ND(1.21)	ND(0.222)	41.6	68.9
P2RI-20	12/18/09	14.5	15.5	ND(1.14) UJ	11.1	237	0.511 J	0.189 J	13.9 J	6.85 J	9.82	ND(0.2)	6.1	0.0562 J	16.9	ND(1.14)	ND(0.209)	27.8	57.9
P2RI-21D	12/18/09	30	32	ND(1.12) UJ	20.2	1180	0.951	0.243 J	26.8 J	6.26 J	21.2	ND(0.193)	13.4	0.065 J	30.4	ND(1.09)	ND(0.2)	60.4	102
P2RI-21S Dup	10/11/10	14	14	ND(1.14)	8.88	192	0.659	1.18	17.2 J	6.54 J	16.8	ND(0.208)	9.03	0.0193 JB	19	ND(1.12)	ND(0.206)	34.8 J	71.2
P2RI-21S	10/11/10	14	14	ND(1.14)	8.71	236	0.679	1.14	17.2 J	7.9 J	16.4	ND(0.209)	10.4	0.00895 JB	21.7	1.19 J	ND(0.205)	34.8 J	64
P2RI-22S	12/17/09	15	15	ND(1.14) UJ	11.3	171	0.276 J	0.192 J	8.26 J	4.23 J	6.81	ND(0.21)	6.66	0.0425 J	10.9	ND(1.12)	ND(0.205)	22.3	59.4
P2RI-23D	10/26/10	22.4	22.8	ND(1.13)	20.9	129	1.1 JB	0.297 J	21.5	8.18	23.3	ND(0.212) UJ	16.7	0.0288 JB	37.5	1.87 J	1.19	52.4	121
P2RI-23S	12/17/09	14	19	ND(1.14) UJ	17.4	229	0.79	0.237 J	21.1 J	5.22 J	17.2	ND(0.196)	11.3	0.0528 J	22.2	ND(1.12)	ND(0.205)	41.8	84
P2RI-24D	11/03/10	47	48	ND(1.07)	13.9	438	1.23 JB	ND(0.15)	24.8	9.41	19.8	ND(0.182)	14.4	0.0616 JB	32.8	ND(1.05)	ND(0.192)	76.1	114
P2RI-24S	01/19/10	7	9	ND(1.09) UJ	11.5 J	335 J	1	0.99	25.4 J	10.9	17.2	ND(0.203)	17.2 J	0.0494 J	29.9	1.24 J	0.348 JB	69 J	107
P2RI-25S	12/19/09	16	18	ND(1.1)	9.8 J	240 J	0.468 J	0.818 J	13.5 J	6 J	11.8 J	ND(0.193)	9.27 J	0.0618 J	17.1 J	ND(1.08)	ND(0.198)	35.9 J	78.4 J
P2RI-26D	10/26/10	23.8	24.8	ND(1.14)	13.2	465	0.809 JB	ND(0.159)	21	7.43	24.3	ND(0.209) UJ	15.1	0.0828 J	28.7	1.98 J	0.715	47.9	92.9
P2RI-26S Dup	10/08/10	15.5	16.5	ND(1.14)	7.1 J	248	0.543 J	1.02	15.6 J	5.22 J	12.1	ND(0.207)	7.54	ND(0.00323)	17.7	1.44 J	ND(0.205)	31.3 J	54
P2RI-26S	10/08/10	15.5	16.5	ND(1.07)	12.9 J	195	0.554	1.14	12.4 J	8.18 J	12.9	ND(0.2)	8.36	0.0245 JB	18.3	1.66 J	ND(0.192)	31.5 J	66.6
P2RI-27D Dup	05/10/11	59	61	ND(1.03)	19.6 J	326	0.911	0.691	25.9	8.96	19.1	ND(0.18)	28.1	0.0483 JB	32.4	1.28 J	ND(0.185)	74.4	107
P2RI-27D	05/10/11	59	61	ND(1.03)	22.5 J	314	0.871	0.599	23.5	8.17	18.5	ND(0.19)	17	0.0409 JB	29	1.03 J	ND(0.186)	64.9	104
P2RI-27DF	05/09/11	85	86	ND(1.03)	8.36	674	0.617	ND(0.144)	8.01	5.57	11.2	ND(0.17)	32	0.0269 JB	13	ND(1.01)	ND(0.185)	25.9	116
P2RI-27S	11/10/10	14.5	14.5	1.14 J	9.63	368 J	0.942	0.165 J	23.5 J	10.2	18.3	ND(0.202)	15.2	0.0516 J	27.9	ND(1.08) UJ	ND(0.197)	54.2 J	109
P2RI-28S	11/03/11	9	10	ND(0.842)	10.6	280	0.902	0.939	23.3	8.09	21.5	ND(0.22)	13.2 J	0.0347 JB	24.3	ND(0.868)	ND(0.106)	42.6	77.7
P2RI-29S	11/03/11	14.5	15.5	ND(0.73) UJ	10.4 J	367 J	0.674	0.347 JB	17.2 J	5.83	16.5	ND(0.21)	11 J	0.0371 JB	18.2	ND(0.752)	0.136 J	32.4 J	61.9
P2RI-30S	11/03/11	5	6	ND(0.749) UJ	9.82 J	260 J	0.694	0.45 J	18.3 J	7.33	16.8	ND(0.2)	10.1 J	0.0681 JB	19.8	1.3 J	0.17 J	35.8 J	61.9
P2RI-31S	11/02/11	9.5	10.5	ND(0.768) UJ	15 J	242 J	0.68	0.437 J	18 J	7.26	16.6	ND(0.21)	11.3 J	0.0338 JB	20.8	ND(0.792)	0.2 J	34.7 J	61.2
P2RI-32S	11/02/11	7	10	0.976 J	12.4 J	321 J	0.952	0.386 J	28.8 J	7.18	24.6	ND(0.2)	16.7 J	0.0297 JB	26.9	1.33 J	0.176 J	76.7 J	101
P2RI-33D	10/07/10	44	45	ND(1.06)	17.4	245	0.952	0.766	24.6	6.81	22.1	ND(0.201)	--	0.06 JB	28	1.81 J	ND(0.191)	56.2	97
P2RI-33S	09/27/10	17	18	ND(1.06)	10.8 J	113 J	0.36 J	0.894	7.97	4.04	9.73	ND(0.195)	7.72 J	0.0534 J	12.4	1.46 J	ND(0.19)	22.6	46.6
P2RI-33S	10/07/10	44	45	--	--	--	--	--	--	--	--	--	16.4	--	--	--	--	--	--
P2RI-34D	09/25/10	42	47	1.04 J	23.1 J	197 J	1.1	1.09	33	7.94	23.8	ND(0.19)	16.5 J	0.0425 J	32	2.89	ND(0.185)	82.5	107
P2RI-34S	09/11/10	20	21	1.96 J	26.4	221	1.08	0.378 J	25.1	8.16	20.9	ND(0.196)	12	0.0278 JB	29.5	1.59 J	ND(0.196)	69.8	106
P2RI-35D	09/25/10	98	100.5	ND(0.991)	21.3 J	349 J	1.04	1.23	21.2	6.98	21.2	ND(0.177)	16.1 J	ND(0.00281)	27.9	2.49	ND(0.178)	61.2	98.3
P2RI-35S	09/11/10	19	20	1.94 J	13.1	288	1.1	0.321 J	29.4	8.17	21.4	ND(0.19)	--	0.0525 JB	29.1	ND(1.09)	ND(0.201)	73.2	106
P2RI-35S	09/11/10	19	21	--	--	--	--	--	--	--	--	--	13	--	--	--	--	--	--
P2RI-36DF	09/14/10	117	118	1.62 J	31.4	381 J	1.05	1.55	40.4 J	11.6	37.8	ND(0.188)	19.5	0.0427 JB	53.5 J	5.97	0.638	107 J	149
P2RI-36S Dup	09/15/10	21	23	1.17 J	12.6	277 J	1.07	0.317 J	30.4 J	10.3	21.7	ND(0.197) UJ	21.8	0.0393 JB	34.1 J	ND(1.05)	ND(0.192)	86.4 J	117
P2RI-36S	09/15/10	21	23	ND(1.08) UJ	14	367 J	1.03	0.306 J	31.1 J	10	22.1	ND(0.202) UJ	15.2	0.0392 JB	33.4 J	ND(1.06)	ND(0.194)	88.2 J	117
P2RI-37D	05/08/11	44	45	ND(1.16)	15.3	406	0.727	ND(0.162)	11.7	7.53	19.6	ND(0.21)	19.4	0.035 JB	24.5	ND(1.14)	ND(0.209)	22.1	98.7
P2RI-37S Dup	09/27/10	18	19	ND(1.07)	12.3 J	185 J	0.444 J	1.12	10.6	5.36	12.6	ND(0.203)	8.03 J	0.0368 J	22.8 J	2.23	ND(0.193)	29.2	65.8
P2RI-37S	09/27/10	18	19	ND(1.14)	12.3 J	169 J	0.441 J	0.815	10.5	4.17	11.5	ND(0.207)	7.81 J	0.0479 J	13.6 J	1.47 J	ND(0.205)	28.3	66.5
P2RI-38S	09/11/10	13	14	1.39 J	11.8	317	1.53	0.34 J	23.8	8.38	19.7	ND(0.201)	20.7	0.0277 JB	26	ND(1.06)	ND(0.196)	64.1	102
P2RI-39S	09/10/10	12	13	1.8 J	34.5	793	1.29	0.621	31.5	14.2	22.8	ND(0.198)	11.7	0.0752 JB	37.6	ND(1.12)	ND(0.205)	89.4	149
P2RI-41D	09/23/10	64	64	1.43 J	30.6 J	343 J	1.06	2.09	26.2	9.26	30.6	ND(0.215)	--	0.0497 J	40.9	5.08	0.235 J	100	128
P2RI-41D	09/23/10	65	65	--	--	--	--	--	--	--	--	--	17 J	--	--	--	--	--	--
P2RI-41S	09/10/10	14	15	1.6 J	17.2	225	1.14	0.385 J	26.9	12	22.9	ND(0.192)	15.2	0.0254 JB	42	ND(1.1)	ND(0.201)	66.9	167

TABLE 4.7-2. ANALYTICAL RESULTS, INORGANICS, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Antimony, Total (mg/kg)	Arsenic, Total (mg/kg)	Barium, Total (mg/kg)	Beryllium, Total (mg/kg)	Cadmium, Total (mg/kg)	Chromium, Total (mg/kg)	Cobalt, Total (mg/kg)	Copper, Total (mg/kg)	Cyanide, Total (mg/kg)	Lead, Total (mg/kg)	Mercury, Total (mg/kg)	Nickel, Total (mg/kg)	Selenium, Total (mg/kg)	Silver, Total (mg/kg)	Vanadium, Total (mg/kg)	Zinc, Total (mg/kg)
P2RI-43S	09/10/10	23	25	1.38 J	10.1	279	0.804	0.327 J	23.9	5.72	18.3	ND(0.201)	13	0.0138 JB	20.4	1.23 J	ND(0.201)	44.9	72.3
P2RI-44D	11/18/10	85	87	ND(1.01)	25.2	263	0.609	0.275 J	18	6.93	19.2	ND(0.19) UJ	24.3	0.0563 JB	25.8	1.98 J	0.189 J	46.1	75.8
P2RI-44S	09/11/10	20	21	1.34 J	14.5	277	0.996	0.304 J	29.2	8.82	21.8	ND(0.196)	13.5	0.102 JB	32.7	1.39 J	ND(0.191)	83.1	113
P2RI-44SR	05/06/11	27	29	ND(1.07)	12.7	317	0.769	ND(0.149)	20.9	11.2	21.6	ND(0.19)	14.2	0.0522 JB	33.2	ND(1.04)	ND(0.192)	42.5	109
P2RI-45D	05/05/11	33	35	ND(1.04)	11.1	288	0.736	ND(0.146)	18	10.3	22	ND(0.19)	18.3	0.0295 JB	30.3	1.18 J	ND(0.188)	29	108
P2RI-45E	05/05/11	13	14	ND(1.09)	11.6	1260	0.643	0.29 J	14.6	7.57	17.3	ND(0.2)	15.7	0.0426 JB	24.7	1.78 JB	ND(0.196)	31.3	85.6
P2RI-45S	09/11/10	6	7	1.27 J	18.6	340	1.12	0.354 J	29.3	6.97	22	ND(0.203)	15.2	0.0519 JB	24.1	1.18 J	ND(0.203)	75	109
P2RI-45S	09/11/10	14	15	1.43 J	13.5	273	0.901	0.198 J	21.3	11.3	14.7	ND(0.2)	14.3	0.034 JB	26.6	ND(1.08)	ND(0.198)	48.9	115
P2RI-46D	09/12/10	65	66	1.59 J	17.8	304	0.912	0.36 J	29.1	8.45	20.4	ND(0.19)	13.4	0.0293 JB	31.8	ND(1.05)	ND(0.193)	82.8	104
P2RI-46DFL	09/14/10	90	91	ND(1.03) UJ	12.8	324 J	0.963	0.278 J	29.8 J	7.78	20.8	ND(0.191)	13.3	0.0394 JB	27.9 J	1.03 J	ND(0.186)	85.4 J	106
P2RI-46S	09/10/10	18	19	1.88 J	14.1	330	1.02	0.293 J	28.4	12.2	22	ND(0.191)	14.5	0.0327 JB	32.8	ND(1.09)	ND(0.2)	74.2	119
P2RI-47DF	09/28/10	88	90.5	ND(1.05)	14.2 J	297 J	1.09	0.955	27.7	7.3	22	ND(0.191)	15.9	0.0465 J	29.4	2.3	ND(0.189)	70.3	97.1
P2RI-47S	09/27/10	23	25	ND(1.09)	20.5 J	240 J	1.22	1.04	30.7	6.74	21.4	ND(0.2)	16 J	0.0454 J	27.8	1.86 J	ND(0.196)	80.3	102
P2RI-48S	09/29/10	8	9	ND(1.17)	9.19 J	239 J	0.918	1.09	25.7	5.49	17.3	ND(0.201)	11.7	0.0225 J	21.8	1.5 J	ND(0.211)	62.3	78.2
P2RI-49S	09/30/10	12	14	ND(1.22)	15.1 J	297 J	0.868	1.15	22	8.03	18.6	ND(0.208)	12.1	0.0274 J	22.8	2.73	ND(0.22)	61.6	88.5
P2RI-50S	11/10/10	18	24	ND(1.08) UJ	16.3	320 J	0.945	ND(0.152)	26.4 J	10.3	23.3	ND(0.186)	18	0.0471 J	32.6	ND(1.06) UJ	ND(0.195)	62.7 J	133
P2RI-52DF	05/21/11	148.5	150	ND(1.04) UJ	12.9	318 J	0.774	0.509 J	21.8 J	7.71	23.2	ND(0.19)	21.4	0.0279 JB	29.2	ND(1.02)	ND(0.187)	49.5 J	109
P2RI-52S	05/23/11	17	18	ND(1.08) UJ	15.2	224 J	0.653	0.717	19.8 J	8.31	18.3	ND(0.19)	10.4	0.0632 JB	28.7	2.23	ND(0.194)	45.3 J	91.8
P2RI-53S	05/24/11	12	14	ND(1.19) UJ	23.7	293	0.787	0.734	19.6	7.78	21.2	ND(0.22)	8.89	0.0176 JB	20.5	ND(1.16)	ND(0.214)	49.8	62.7
P2RI-54SL	05/21/11	95	97	ND(1.11) UJ	8.84	166 J	0.598	0.471 J	14.8 J	6.57	15.9	ND(0.2)	8.81	0.023 JB	17.5	ND(1.09)	ND(0.2)	30.3 J	64.7
P2RI-54SU	05/24/11	11	13	ND(1.17) UJ	11.3	341	1.29	0.79	35.3	9.39	24.7	ND(0.21)	12.5	0.0355 JB	29.9	ND(1.15)	ND(0.211)	89.9	101
P2RI-55DF	10/27/11	128	133	ND(0.679) UJ	15.4 J	292 J	0.811	0.895	20.9 J	10.1	25.2 J	ND(0.18)	18.2	0.0184 JB	42.7	ND(0.7)	ND(0.0854)	47.1 J	107
P2RI-55S	10/29/11	27	29	1.11 J	19.6	296 J	0.733	ND(0.0214)	22.1 J	8.33	23.7	ND(0.19)	14.7 J	0.102 JB	30.6	2.03 J	0.223 JB	57.4 J	103
P2RI-56DF	10/26/11	72	74	ND(0.752) UJ	19.3 J	421 J	1.27	0.595	26.3 J	9.41	23	ND(0.2)	16.5	0.0511 JB	32	ND(0.775)	ND(0.0946)	63.3 J	122 J
P2RI-56S	10/31/11	18	22	0.903 J	8.42	317 J	0.941	ND(0.0224)	20.2 J	8.83	20.9	ND(0.2)	17.2 J	0.0518 JB	29.3	ND(0.763)	0.225 JB	40.8 J	114
P2RI-57S	11/02/11	5	6	0.812 J	17.1 J	412 J	0.746	0.337 JB	20.9 J	8.51	21.7	ND(0.19)	14.1 J	0.0557 JB	26.1	1.44 J	0.11 J	56.8 J	94.9
P2RI-58S	11/01/11	13	14	ND(0.728) UJ	19.8 J	329 J	0.719	0.367 J	19.8 J	7.43	19.9	ND(0.21)	13.3 J	0.0387 JB	24.4	1.41 J	0.198 JB	51.7 J	89
P2RI-59S	11/01/11	11	12	ND(0.749) UJ	18.6 J	268 J	0.78	0.393 J	22.7 J	6.99	23.1	ND(0.2)	11.5 J	0.0462 JB	26.6	1.36 J	0.16 JB	57.5 J	95.3
P2RI-60S	10/28/11	13	15	0.895 J	10.7	359 J	1.02	0.399 J	27.9 J	9.45	24.8	ND(0.23)	12.7 J	0.0217 JB	30.7	0.89 J	0.323 JB	64.7 J	101
P2RI-61S	11/02/11	9	10	1.57 J	12.2 J	356 J	1.17	0.399 J	34 J	8.57	22.4	ND(0.22)	12.6 J	0.0171 JB	29.9	ND(0.834)	0.158 J	81.3 J	101
P2RI-62S	11/02/11	7	8	ND(0.908) UJ	11.2 J	264 J	0.957	0.536 J	24.8 J	8.37	24	ND(0.24)	12.5 J	0.0418 JB	24.3	ND(0.935)	0.216 J	44.8 J	84.7
P2RI-63S	11/03/11	13.5	14.5	ND(0.784)	14.9	296	1.05	0.81	29.3	10.8	22.8	ND(0.21)	14.3 J	0.0343 JB	33.4	ND(0.807)	ND(0.0985)	71.3	103
PA-5R	11/02/11	9	10	1.43 J	11.2 J	223 J	0.819	0.386 J	26.7 J	9.09	23.6	ND(0.21)	11.4 J	0.0433 JB	26.3	ND(0.807)	0.176 J	44.2 J	78.4
Direct Exposure, Subsurface, 5/2013				3.1	0.61	1,500	16	7	12,000	2.3	310	4.7	400	2.3	150	39	39	39	2,300
Migration to Groundwater, Subsurface, 5/2013				2.7	2.9	414	32	3.8	1,800,000	2.1	460	20	140	NA	147	2.6	6	780	2,900

Notes:
ft-bgs - feet below ground surface
mg/kg - milligrams per kilogram
-- - Data not collected or analyzed
NA - Soil Standard or RBSL does not exist
ND - Constituent not detected - method detection limit in mg/kg provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Benzene (mg/kg)	2-Butanone (mg/kg)	n-Butyl-benzene (mg/kg)	sec-Butylbenzene (mg/kg)	tert-Butyl-benzene (mg/kg)	Carbon Disulfide (mg/kg)	Chlorobenzene (mg/kg)	Chloroform (mg/kg)	Cyclohexane (mg/kg)
GW-4R	10/31/11	10	11	ND(0.0006)	ND(0.005)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ
GW-16R	10/11/10	8.5	9.5	ND(0.0306) UJ	ND(0.25)	0.306 J	0.182 J	ND(0.0613)	ND(0.0613)	ND(0.0613)	ND(0.0613)	3.97 J
GW-17R	10/31/11	9	10	ND(0.0005)	ND(0.004) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-20D	10/20/10	16.5	18.5	ND(0.000568)	ND(0.00455)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
GW-20RS Dup	10/20/10	8	11.5	ND(0.000568)	ND(0.00455)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)
GW-20RS	10/20/10	8	11.5	ND(0.000572)	ND(0.00458)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)
GW-A	11/06/10	60	60	0.00846 J	ND(0.00423)	0.00846 J	0.00529 J	ND(0.00106) UJ	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.0159 J
GW-C-25	11/07/10	39	39	0.00213 J	ND(0.00426)	ND(0.00106) R	ND(0.00106) R	ND(0.00106) R	ND(0.00106)	ND(0.00106) R	ND(0.00106)	0.00852 J
GW-C-46S	09/29/10	24	25	0.000751 J	ND(0.00429)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	0.00215 J
GW-C-47S Dup	09/28/10	16	17	1.42	ND(0.219)	0.23 J	0.12 J	ND(0.0547)	ND(0.0547)	ND(0.0547)	ND(0.0547)	0.875
GW-C-47S	09/28/10	16	17	1.42	ND(0.208)	0.208 J	0.12 J	ND(0.0526)	ND(0.0526)	ND(0.0526)	ND(0.0526)	0.865
GW-C-48	11/06/10	27	27	0.169 J	0.00675 J	0.0371 J	0.0337 J	0.00225 J	ND(0.00112)	ND(0.00112)	0.00112 JB	0.0315 J
GW-CD	11/04/10	65	66	0.00416 J	ND(0.00416)	ND(0.00104) UJ	ND(0.00104) UJ	ND(0.00104) UJ	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104) UJ
GW-CDF Dup	11/07/10	109	110	0.0155 J	ND(0.00415)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00622 J
GW-CDF	11/07/10	109	110	0.0145 J	ND(0.00415)	ND(0.00104) UJ	ND(0.00104) UJ	ND(0.00104) UJ	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00622 J
GW-CS	11/04/10	17	18	ND(0.000545)	ND(0.00436)	ND(0.00109) R	ND(0.00109) R	ND(0.00109) R	ND(0.00109)	ND(0.00109)	ND(0.00109)	0.00218 J
GW-D Dup	11/05/10	49	51	0.00528 J	ND(0.00422)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00211 J
GW-D	11/05/10	49	51	0.0463 J	ND(0.00421)	ND(0.00105) R	ND(0.00105) R	ND(0.00105) R	ND(0.00105)	ND(0.00105) R	ND(0.00105)	0.0105 J
GW-ED Dup	11/08/10	64	64	0.00326 J	ND(0.00435)	ND(0.00109) R	ND(0.00109) R	ND(0.00109) R	ND(0.00109)	ND(0.00109) R	ND(0.00109)	0.00761 J
GW-ED	11/08/10	64	64	0.00076 J	ND(0.00434)	ND(0.00109) R	ND(0.00109) R	ND(0.00109) R	ND(0.00109)	ND(0.00109) UJ	ND(0.00109)	0.00434 J
GW-ES Dup	10/14/10	12	16	0.143 J	0.0527	0.0714	0.0593	0.00329 J	0.00549	ND(0.0011)	ND(0.0011)	0.307 J
GW-ES	10/14/10	12	16	0.274 J	0.0471	0.0669	0.0548	0.00329 J	0.00329 J	ND(0.0011)	ND(0.0011)	0.121 J
GW-FS	09/28/10	15	16	0.00227 J	ND(0.00454)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
GW-GS	09/27/10	15	16	ND(0.00057)	ND(0.00457)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
GW-GS	09/29/10	8	9	0.00238 J	ND(0.00477)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)
GW-K	09/10/10	39	40	0.00317 J	ND(0.00423)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00211 J
GW-L	05/07/11	29	31	ND(0.0005)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-MS	09/28/10	14	15	0.0022 J	ND(0.00441)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	0.0022 J
GW-NS Dup	12/04/10	9	10	ND(0.000577)	ND(0.00462)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
GW-NS	12/04/10	9	10	ND(0.000582)	ND(0.00466)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-1D	01/10/10	20	21	ND(0.000554)	ND(0.00444)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)
P2RI-1D	01/10/10	51	52	0.0076	ND(0.00434)	ND(0.00109) R	ND(0.00109) R	ND(0.00109) R	ND(0.00109)	ND(0.00109) R	ND(0.00109)	0.0119
P2RI-3D	01/09/10	79	81	0.327	ND(0.2)	0.0495 J	ND(0.0495)	ND(0.0495)	ND(0.0495)	ND(0.0495)	ND(0.0495)	0.274
P2RI-3S	12/20/09	16	18	ND(0.000556) UJ	ND(0.00445)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-4S	12/16/09	21	25	0.0885 J	ND(0.25)	0.386	0.568	ND(0.0613)	ND(0.0613)	ND(0.0613)	ND(0.0613)	12.5
P2RI-4D	01/11/10	34	36	0.00644	ND(0.0043)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)
P2RI-5S	05/06/11	11	12	0.018	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.026
P2RI-6	12/16/09	24	27	2.53	ND(0.229)	0.422	0.277 J	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.0591)	7.96
P2RI-8	12/17/09	33	33	1.59	ND(0.202)	0.128 J	0.067 J	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.0499)	1.38
P2RI-9D	01/24/10	50	53	0.00107 J	ND(0.00427)	ND(0.00107) R	ND(0.00107) R	ND(0.00107) R	ND(0.00107)	ND(0.00107)	ND(0.00107)	0.00213 J
P2RI-9S Dup	12/20/09	15	16	0.000701 J	ND(0.00468)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-9S	12/20/09	15	16	0.00355 J	ND(0.00473)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-9S	12/20/09	24	26	0.000645 J	ND(0.00516)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)
P2RI-10D	01/20/10	67	72	0.024	0.0073 JB	ND(0.00104) R	ND(0.00104) R	ND(0.00104) R	ND(0.00104)	ND(0.00104) UJ	ND(0.00104)	0.00313 J
P2RI-10S	01/11/10	14	16	ND(0.00056)	ND(0.00448)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-11D	01/10/10	59	60	0.00836	ND(0.00418)	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00209 J	ND(0.00104)	ND(0.00104)	ND(0.00104)
P2RI-11S	01/09/10	9	9	0.000559 J	ND(0.00448)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-11S	01/09/10	19	19	0.000662 J	ND(0.00442)	ND(0.0011) R	ND(0.0011) R	ND(0.0011) R	0.00221 J	ND(0.0011)	ND(0.0011)	ND(0.0011)
P2RI-12	01/19/10	7	12	ND(0.000575)	ND(0.0046)	ND(0.00115) R	ND(0.00115) R	ND(0.00115) R	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-13 Dup	01/12/10	22	24	4.22 J	ND(0.206)	0.0725 J	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.0498)	0.768
P2RI-13	01/12/10	22	24	1.1 J	ND(0.208)	0.0997 J	0.0559 J	ND(0.0526)	ND(0.0526)	ND(0.0526)	ND(0.0526)	0.789
P2RI-14	12/19/09	13	16	ND(0.000553)	ND(0.00443)	ND(0.00111)	0.00221 J	ND(0.00111)	0.00221 J	ND(0.00111)	ND(0.00111)	ND(0.00111)

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Benzene (mg/kg)	2-Butanone (mg/kg)	n-Butyl-benzene (mg/kg)	sec-Butylbenzene (mg/kg)	tert-Butyl-benzene (mg/kg)	Carbon Disulfide (mg/kg)	Chlorobenzene (mg/kg)	Chloroform (mg/kg)	Cyclohexane (mg/kg)
P2RI-15	01/19/10	5	10	ND(0.000547)	ND(0.00438)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)
P2RI-16D	10/27/10	18	19	ND(0.000557)	ND(0.00446)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-16S	12/19/09	13	16	ND(0.000562) UJ	ND(0.0045)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-17	12/19/09	12	13	ND(0.000574) UJ	ND(0.00459)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-18	12/21/09	11	12	ND(0.000583) UJ	ND(0.00467)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-18D	10/11/10	15.5	16.5	ND(0.000707) UJ	ND(0.00472)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	0.00236 J
P2RI-18SR	10/11/10	9	10	ND(0.000572) UJ	ND(0.00458)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	0.00115 J
P2RI-19D	10/26/10	22.5	22.5	ND(0.000579)	ND(0.00463)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)
P2RI-19S	12/18/09	9.5	10.5	ND(0.0292)	ND(0.241)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)
P2RI-20	12/18/09	14.5	15.5	ND(0.000587)	ND(0.0047)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-21S	12/18/09	30	32	ND(0.0261)	ND(0.204)	ND(0.0522)	ND(0.0522)	ND(0.0522)	ND(0.0522)	ND(0.0522)	ND(0.0522)	0.085 J
P2RI-21S Dup	10/11/10	14	14	ND(0.000578) UJ	ND(0.00462)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	0.00231 J
P2RI-21S	10/11/10	14	14	ND(0.000581) UJ	ND(0.00465)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	0.00232 J
P2RI-22S	12/17/09	15	15	ND(0.000582)	ND(0.00466)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-23D	10/26/10	22.4	22.8	0.00106 J	ND(0.0047)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-23S	12/17/09	14	19	0.000921 J	ND(0.00461)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-24D	11/03/10	47	48	ND(0.000534)	ND(0.00427)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)
P2RI-24S	01/19/10	7	9	ND(0.000563)	ND(0.00451)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-25S	12/19/09	16	18	ND(0.000566) UJ	ND(0.00453)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-26D	10/26/10	23.8	24.8	0.336	ND(0.00463)	ND(0.00116) R	ND(0.00116) R	ND(0.00116) R	ND(0.00116)	ND(0.00116)	ND(0.00116)	0.00927
P2RI-26S Dup	10/08/10	15.5	16.5	0.00115 J	ND(0.00461)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-26S	10/08/10	15.5	16.5	0.00444 J	ND(0.00444)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	0.00222 J
P2RI-27D Dup	05/10/11	59	61	0.004 J	ND(0.004)	ND(0.001) R	ND(0.001) R	ND(0.001) R	ND(0.001)	ND(0.001) R	ND(0.001)	0.004 J
P2RI-27D	05/10/11	59	61	0.002 J	ND(0.005)	ND(0.001) R	ND(0.001) R	ND(0.001) R	ND(0.001)	ND(0.001) R	ND(0.001)	0.003 J
P2RI-27DF	05/09/11	85	86	0.44	ND(0.23)	0.49	0.26 J	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	0.43
P2RI-27S	11/10/10	14.5	14.5	ND(0.000559)	ND(0.00448)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-28S	11/03/11	9	10	0.001 J	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-29S	11/03/11	14.5	15.5	ND(0.0006)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-30S	11/03/11	5	6	ND(0.0006)	0.01 JB	ND(0.001)	0.007	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-31S	11/02/11	9.5	10.5	ND(0.0006)	ND(0.005)	ND(0.001)	0.12	0.006	0.002 J	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-32S	11/02/11	7	10	ND(0.0006)	ND(0.005)	ND(0.001)	0.18	0.015	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-33D	10/07/10	44	45	ND(0.000559)	ND(0.00447)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-33S	09/27/10	17	18	ND(0.000541)	ND(0.00433)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)
P2RI-34D	09/25/10	42	47	ND(0.000529)	ND(0.00423)	ND(0.000952) R	ND(0.000952) R	ND(0.000952) R	ND(0.000952)	ND(0.000952) UJ	ND(0.000952)	0.00317 J
P2RI-34S	09/11/10	20	21	0.00109 J	ND(0.00436)	ND(0.00109) R	ND(0.00109) R	ND(0.00109) R	0.00327 J	ND(0.00109) R	ND(0.00109)	0.00436 J
P2RI-35D	09/25/10	98	100.5	0.0104	ND(0.00416)	ND(0.00104) R	ND(0.00104) R	ND(0.00104) R	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00312 J
P2RI-35S	09/11/10	19	20	0.00446 J	ND(0.00446)	ND(0.00112) R	ND(0.00112) R	ND(0.00112) R	0.00223 J	ND(0.00112) R	ND(0.00112) R	0.01 J
P2RI-36DF	09/14/10	117	118	0.0487	0.031 J	0.00111 J	ND(0.00111) R	ND(0.00111) R	0.0409	ND(0.00111) R	ND(0.00111)	0.00664
P2RI-36S Dup	09/15/10	21	23	ND(0.000546)	ND(0.00437)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
P2RI-36S	09/15/10	21	23	ND(0.000561)	ND(0.00449)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-37D	05/08/11	44	45	0.001 J	ND(0.004)	ND(0.001) R	ND(0.001) R	ND(0.001) R	ND(0.001) R	ND(0.001) R	ND(0.001) R	0.008 J
P2RI-37S Dup	09/27/10	18	19	ND(0.000564)	ND(0.00451)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-37S	09/27/10	18	19	ND(0.000575)	ND(0.0046)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Benzene (mg/kg)	2-Butanone (mg/kg)	n-Butyl-benzene (mg/kg)	sec-Butylbenzene (mg/kg)	tert-Butyl-benzene (mg/kg)	Carbon Disulfide (mg/kg)	Chlorobenzene (mg/kg)	Chloroform (mg/kg)	Cyclohexane (mg/kg)
P2RI-38S	09/11/10	13	14	0.00223 J	ND(0.00447)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)
P2RI-39S	09/10/10	12	13	0.00232 J	ND(0.00465)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)
P2RI-41D	09/23/10	64	64	ND(0.0274)	ND(0.226)	ND(0.0548) UJ	ND(0.0548) UJ	ND(0.0548) UJ	ND(0.0548)	ND(0.0548) UJ	ND(0.0548)	0.286
P2RI-41S	09/10/10	14	15	0.00226 J	ND(0.00452)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-43S	09/10/10	23	25	0.224 J	ND(0.224)	0.962	0.548	ND(0.0559)	ND(0.0559)	ND(0.0559)	ND(0.0559)	2.68
P2RI-44D	11/18/10	85	87	0.0254	ND(0.00423)	ND(0.00106) R	ND(0.00106) R	ND(0.00106) R	0.00317 J	ND(0.00106)	ND(0.00106)	0.00951
P2RI-44S	09/11/10	20	21	0.00218 J	ND(0.00436)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
P2RI-44SR	05/06/11	27	29	ND(0.0005)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-45D	05/05/11	33	35	ND(0.0005)	ND(0.004)	ND(0.001) R	ND(0.001) R	ND(0.001) R	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)
P2RI-45E	05/05/11	13	14	ND(0.029)	ND(0.23)	0.15 J	0.8	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)
P2RI-45S	09/11/10	6	7	0.00338 J	0.00676 J	ND(0.00113)	0.0146	0.00113 J	ND(0.00113)	ND(0.00113)	ND(0.00113)	0.00225 J
P2RI-45S	09/11/10	14	15	0.766	ND(0.222)	0.189 J	0.109 J	ND(0.0566)	ND(0.0566)	ND(0.0566)	ND(0.0566)	0.744
P2RI-46D	09/12/10	65	66	0.0547	0.00894 J	0.00447 J	0.00559 J	ND(0.00112) R	0.00559 J	ND(0.00112)	ND(0.00112)	0.291
P2RI-46DFL	09/14/10	90	91	0.00531 J	ND(0.00425)	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00106 J	ND(0.00106)	ND(0.00106)	ND(0.00106)
P2RI-46S	09/10/10	18	19	0.957	ND(0.225)	0.428	0.248 J	ND(0.0563)	ND(0.0563)	ND(0.0563)	ND(0.0563)	1.24
P2RI-47DF	09/28/10	88	90.5	0.0223	0.00955 JB	ND(0.00106) R	ND(0.00106) R	ND(0.00106) R	ND(0.00106)	ND(0.00106) UJ	ND(0.00106)	0.0159
P2RI-47S	09/27/10	23	25	ND(0.000556)	ND(0.00445)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-48S	09/29/10	8	9	0.00107 J	ND(0.00474)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-49S	09/30/10	12	14	ND(0.000611)	ND(0.0049)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
P2RI-50S	11/10/10	8	24	0.0208	ND(0.00438)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	0.00438 J
P2RI-52DF	05/21/11	148.5	150	0.018	ND(0.004)	ND(0.001) R	ND(0.001) R	ND(0.001) R	0.002 J	ND(0.001)	ND(0.001)	0.004 J
P2RI-52S	05/23/11	17	18	ND(0.0006)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S	05/24/11	12	14	0.031	0.032 JB	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J
P2RI-54SL	05/21/11	95	97	ND(0.0005)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-54SU	05/24/11	0	13	ND(0.0006)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-55DF	10/27/11	128	133	0.008	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J
P2RI-55S	10/29/11	27	29	ND(0.0005)	ND(0.004) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-56DF	10/26/11	72	74	0.002 J	ND(0.004)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ
P2RI-56S	10/31/11	18	22	ND(0.0005)	ND(0.004) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-57S	11/02/11	5	6	ND(0.0005)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-58S	11/01/11	13	14	ND(0.0006)	ND(0.005)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ
P2RI-59S	11/01/11	11	12	ND(0.0006)	ND(0.005)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ
P2RI-60S	10/28/11	13	15	ND(0.0006)	ND(0.005) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-61S	11/02/11	9	10	ND(0.0006)	0.007 JB	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-62S	11/02/11	4	8	ND(0.0007)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	11/03/11	13.5	14.5	0.001 J	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
PA-5R	11/02/11	9	10	ND(0.0006)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Direct Exposure, Subsurface, 5/2013				200	2,800	390	780	780	82	29	0.29	700
Migration to Groundwater, Subsurface, 5/2013				0.04	10	2.5	4.6	1.1	2.1	0.68	0.2	130

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1,2-Dibromo-ethane (mg/kg)	1,1-Dichloro-ethane (mg/kg)	1,2-Dichloro-ethane (mg/kg)	Ethyl-benzene (mg/kg)	Hexane (mg/kg)	Isopropyl-benzene (mg/kg)	MTBE (mg/kg)	n-Propyl-benzene (mg/kg)	Styrene (mg/kg)
GW-4R	10/31/11	10	11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.0006)	ND(0.001) UJ	ND(0.001)
GW-16R	10/11/10	8.5	9.5	ND(0.0613)	ND(0.0613)	ND(0.0613)	0.817	8.06 J	0.488	ND(0.0306)	0.715	ND(0.0613)
GW-17R	10/31/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
GW-20D	10/20/10	16.5	18.5	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.000568)	ND(0.00114)	ND(0.00114)
GW-20RS Dup	10/20/10	8	11.5	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.000568)	ND(0.00102)	ND(0.00102)
GW-20RS	10/20/10	8	11.5	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.000572)	ND(0.00103)	ND(0.00103)
GW-A	11/06/10	60	60	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.0254 J	0.0211	0.00317 J	ND(0.000528)	0.0137 J	ND(0.00106)
GW-C-25	11/07/10	39	39	ND(0.00106) R	ND(0.00106)	ND(0.00106)	0.00319 J	0.016	ND(0.00106) R	ND(0.000532)	ND(0.00106) R	ND(0.00106) R
GW-C-46S	09/29/10	24	25	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	0.00536 J	ND(0.00107)	ND(0.000536)	ND(0.00107)	ND(0.00107)
GW-C-47S Dup	09/28/10	16	17	ND(0.0547)	ND(0.0547)	ND(0.0547)	2.19	1.97	0.328	ND(0.0274)	0.667	ND(0.0547)
GW-C-47S	09/28/10	16	17	ND(0.0526)	ND(0.0526)	ND(0.0526)	2.63	2.08	0.372	ND(0.0263)	0.767	ND(0.0526)
GW-C-48	11/06/10	27	27	ND(0.00112)	ND(0.00112)	0.00675	2.02 J	0.0731	0.0979 J	ND(0.000562)	0.27 J	ND(0.00112)
GW-CD	11/04/10	65	66	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00104 J	0.00208 J	ND(0.00104) UJ	ND(0.00052)	ND(0.00104) UJ	ND(0.00104)
GW-CDF Dup	11/07/10	109	110	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00518 J	0.00829	ND(0.00104)	ND(0.000518)	ND(0.00104)	ND(0.00104)
GW-CDF	11/07/10	109	110	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00415 J	0.0104	ND(0.00104) UJ	ND(0.000518)	ND(0.00104) UJ	ND(0.00104)
GW-CS	11/04/10	17	18	ND(0.00109)	ND(0.00109)	ND(0.00109)	0.00436 J	0.00545 J	ND(0.00109)	ND(0.000545)	ND(0.00109) R	ND(0.00109)
GW-D Dup	11/05/10	49	51	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00211 J	0.00422 J	ND(0.00106)	ND(0.000527)	ND(0.00106)	ND(0.00106)
GW-D	11/05/10	49	51	ND(0.00105) R	ND(0.00105)	ND(0.00105)	0.0179 J	0.0105 J	ND(0.00105) R	ND(0.000526)	0.00105 J	ND(0.00105) R
GW-ED Dup	11/08/10	64	64	ND(0.00109) R	ND(0.00109)	ND(0.00109)	0.00435 J	0.0109	ND(0.00109) R	ND(0.000543)	0.00543 J	ND(0.00109) R
GW-ED	11/08/10	64	64	ND(0.00109)	ND(0.00109)	ND(0.00109)	0.00109 J	0.0076	ND(0.00109) UJ	ND(0.000542)	ND(0.00109) R	ND(0.00109) UJ
GW-ES Dup	10/14/10	12	16	ND(0.0011)	ND(0.0011)	ND(0.0011)	1.32 J	1.1 J	0.132	ND(0.000548)	0.252	ND(0.0011)
GW-ES	10/14/10	12	16	ND(0.0011)	ND(0.0011)	ND(0.0011)	0.636 J	0.186 J	0.132	ND(0.000548)	0.252	ND(0.0011)
GW-FS	09/28/10	15	16	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.000566)	ND(0.00113)	ND(0.00113)
GW-GS	09/27/10	15	16	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00057)	ND(0.00114)	ND(0.00114)
GW-GS	09/29/10	8	9	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.000595)	ND(0.00119)	ND(0.00119)
GW-K	09/10/10	39	40	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00211 J	ND(0.00106)	ND(0.000528)	ND(0.00106)	ND(0.00106)
GW-L	05/07/11	29	31	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
GW-MS	09/28/10	14	15	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	0.0022 J	ND(0.0011)	ND(0.00055)	ND(0.0011)	ND(0.0011)
GW-NS Dup	12/04/10	9	10	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.000577)	ND(0.00115)	ND(0.00115)
GW-NS	12/04/10	9	10	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.000582)	ND(0.00117)	ND(0.00117)
P2RI-1D	01/10/10	20	21	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000554)	ND(0.000998)	ND(0.000998)
P2RI-1D	01/10/10	51	52	ND(0.00109) R	ND(0.00109)	ND(0.00109)	0.025 J	0.0163	0.00109 J	ND(0.000542)	0.00543 J	ND(0.00109) R
P2RI-3D	01/09/10	79	81	ND(0.0495)	ND(0.0495)	ND(0.0495)	0.527	0.759	0.0601 J	ND(0.0242)	0.0969 J	ND(0.0495)
P2RI-3S	12/20/09	16	18	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.000556)	ND(0.00111)	ND(0.00111)
P2RI-4S	12/16/09	21	25	ND(0.0613)	ND(0.0613)	ND(0.0613)	5.9	29.5	1.93	ND(0.0306)	2.27	ND(0.0613)
P2RI-4D	01/11/10	34	36	ND(0.00107)	ND(0.00107)	ND(0.00107)	0.00644	0.00752	ND(0.00107)	ND(0.000537)	ND(0.00107)	ND(0.00107)
P2RI-5S	05/06/11	11	12	ND(0.001)	ND(0.001)	ND(0.001)	0.042	0.06 J	0.005 J	ND(0.0006)	0.005 J	ND(0.001)
P2RI-6	12/16/09	24	27	ND(0.0591)	ND(0.0591)	ND(0.0591)	4.95	15.7	0.941	ND(0.029)	1.45	ND(0.0591)
P2RI-8	12/17/09	33	33	ND(0.0499)	ND(0.0499)	ND(0.0499)	2.34	2.34	0.308	ND(0.0244)	0.457	ND(0.0499)
P2RI-9D	01/24/10	50	53	ND(0.00107)	ND(0.00107)	ND(0.00107)	0.00534	0.00427 J	ND(0.00107)	ND(0.000533)	ND(0.00107) R	ND(0.00107)
P2RI-9S Dup	12/20/09	15	16	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.000584)	ND(0.00117)	ND(0.00117)
P2RI-9S	12/20/09	15	16	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.000591)	ND(0.00118)	ND(0.00118)
P2RI-9S	12/20/09	24	26	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.000645)	ND(0.00129)	ND(0.00129)
P2RI-10D	01/20/10	67	72	ND(0.00104) UJ	ND(0.00104)	ND(0.00104)	0.0136 J	0.00521 J	ND(0.00104) UJ	ND(0.000521)	0.00209 J	ND(0.00104) UJ
P2RI-10S	01/11/10	14	16	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00056)	ND(0.00112)	ND(0.00112)
P2RI-11D	01/10/10	59	60	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00209 J	0.00104 J	ND(0.00104)	ND(0.000522)	ND(0.00104)	ND(0.00104)
P2RI-11S	01/09/10	9	9	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.000559)	ND(0.00112)	ND(0.00112)
P2RI-11S	01/09/10	19	19	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.000552)	ND(0.0011) R	ND(0.0011)
P2RI-12	01/19/10	7	12	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.000575)	ND(0.00115) R	ND(0.00115)
P2RI-13 Dup	01/12/10	22	24	ND(0.0498)	ND(0.0498)	ND(0.0498)	1.3 J	0.866	0.141 J	ND(0.0249)	0.238 J	ND(0.0498)
P2RI-13	01/12/10	22	24	ND(0.0526)	ND(0.0526)	ND(0.0526)	1.86 J	1.42	0.219 J	ND(0.0263)	0.394	ND(0.0526)
P2RI-14	12/19/09	13	16	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.000553)	ND(0.00111)	ND(0.00111)

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1,2-Dibromo-ethane (mg/kg)	1,1-Dichloro-ethane (mg/kg)	1,2-Dichloro-ethane (mg/kg)	Ethyl-benzene (mg/kg)	Hexane (mg/kg)	Isopropyl-benzene (mg/kg)	MTBE (mg/kg)	n-Propyl-benzene (mg/kg)	Styrene (mg/kg)
P2RI-15	01/19/10	5	10	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.000547)	ND(0.0011)	ND(0.0011)
P2RI-16D	10/27/10	18	19	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.000557)	ND(0.00111)	ND(0.00111)
P2RI-16S	12/19/09	13	16	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.000562)	ND(0.00112)	ND(0.00112)
P2RI-17	12/19/09	12	13	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.000574)	ND(0.00115)	ND(0.00115)
P2RI-18	12/21/09	11	12	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.000583)	ND(0.00117)	ND(0.00117)
P2RI-18D	10/11/10	15.5	16.5	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	0.00236 J	ND(0.00118)	ND(0.000707)	ND(0.00118)	ND(0.00118)
P2RI-18SR	10/11/10	9	10	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	0.00229 J	ND(0.00115)	ND(0.000572)	ND(0.00115)	ND(0.00115)
P2RI-19D	10/26/10	22.5	22.5	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.000579)	ND(0.00104)	ND(0.00104)
P2RI-19S	12/18/09	9.5	10.5	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0292)	ND(0.0596)	ND(0.0596)
P2RI-20	12/18/09	14.5	15.5	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.000587)	ND(0.00118)	ND(0.00118)
P2RI-21S	12/18/09	30	32	ND(0.0522)	ND(0.0522)	ND(0.0522)	0.193 J	0.363	ND(0.0522)	ND(0.0261)	0.0816 J	ND(0.0522)
P2RI-21S Dup	10/11/10	14	14	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	0.00231 J	ND(0.00116)	ND(0.000578)	ND(0.00116)	ND(0.00116)
P2RI-21S	10/11/10	14	14	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	0.00232 J	ND(0.00116)	ND(0.000581)	ND(0.00116)	ND(0.00116)
P2RI-22S	12/17/09	15	15	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.000582)	ND(0.00117)	ND(0.00117)
P2RI-23D	10/26/10	22.4	22.8	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.000587)	ND(0.00118)	ND(0.00118)
P2RI-23S	12/17/09	14	19	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.000576)	ND(0.00115)	ND(0.00115)
P2RI-24D	11/03/10	47	48	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	0.00107 J	ND(0.00107)	ND(0.000534)	ND(0.00107)	ND(0.00107)
P2RI-24S	01/19/10	7	9	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.000563)	ND(0.00113)	ND(0.00113)
P2RI-25S	12/19/09	16	18	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.000566)	ND(0.00113)	ND(0.00113)
P2RI-26D	10/26/10	23.8	24.8	ND(0.00116)	ND(0.00116)	ND(0.00116)	0.0243	0.00927	ND(0.00116)	ND(0.000579)	ND(0.00116) R	ND(0.00116)
P2RI-26S Dup	10/08/10	15.5	16.5	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	0.0023 J	ND(0.00115)	ND(0.000576)	ND(0.00115)	ND(0.00115)
P2RI-26S	10/08/10	15.5	16.5	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	0.00333 J	ND(0.00111)	ND(0.000554)	ND(0.00111)	ND(0.00111)
P2RI-27D Dup	05/10/11	59	61	ND(0.001) R	ND(0.001)	ND(0.001)	0.01 J	0.005 J	ND(0.001) R	ND(0.0005)	0.001 J	ND(0.001) R
P2RI-27D	05/10/11	59	61	ND(0.001) R	ND(0.001)	ND(0.001)	0.006 J	0.004 J	ND(0.001) R	ND(0.0006)	ND(0.001) R	ND(0.001) R
P2RI-27DF	05/09/11	85	86	ND(0.057)	ND(0.057)	ND(0.057)	1.8	0.69 J	0.5	ND(0.029)	0.95	ND(0.057)
P2RI-27S	11/10/10	14.5	14.5	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.000559)	ND(0.00112)	ND(0.00112)
P2RI-28S	11/03/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-29S	11/03/11	14.5	15.5	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-30S	11/03/11	5	6	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-31S	11/02/11	9.5	10.5	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.007	ND(0.0006)	0.005 J	ND(0.001)
P2RI-32S	11/02/11	7	10	ND(0.001)	ND(0.001)	ND(0.001)	0.002 J	ND(0.001)	0.083	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-33D	10/07/10	44	45	ND(0.00112)	ND(0.00112)	ND(0.00112)	0.00112 J	0.00336 J	ND(0.00112)	ND(0.000559)	ND(0.00112)	ND(0.00112)
P2RI-33S	09/27/10	17	18	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000541)	ND(0.000974)	ND(0.000974)
P2RI-34D	09/25/10	42	47	ND(0.000952) UJ	ND(0.000952)	ND(0.000952)	0.00317 J	0.00741	ND(0.000952) UJ	ND(0.000529)	0.00106 J	ND(0.000952) UJ
P2RI-34S	09/11/10	20	21	ND(0.00109) R	ND(0.00109)	ND(0.00109)	0.00327 J	0.0131	ND(0.00109) R	ND(0.000544)	0.00218 J	ND(0.00109) R
P2RI-35D	09/25/10	98	100.5	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.0052 J	0.0052 J	ND(0.00104)	ND(0.00052)	ND(0.00104) R	ND(0.00104)
P2RI-35S	09/11/10	19	20	ND(0.00112) R	ND(0.00112) R	ND(0.00112) R	0.00223 J	0.0212 J	ND(0.00112) R	ND(0.000558) R	0.00112 J	ND(0.00112) R
P2RI-36DF	09/14/10	117	118	ND(0.00111) R	ND(0.00111)	0.00111 J	0.0243 J	0.00774	0.00111 J	ND(0.000553)	0.00553 J	0.00332 J
P2RI-36S Dup	09/15/10	21	23	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.000546)	ND(0.00109)	ND(0.00109)
P2RI-36S	09/15/10	21	23	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.000561)	ND(0.00112)	ND(0.00112)
P2RI-37D	05/08/11	44	45	ND(0.001) R	ND(0.001) R	ND(0.001) R	0.019 J	0.017 J	ND(0.001) R	ND(0.0005) R	0.003 J	ND(0.001) R
P2RI-37S Dup	09/27/10	18	19	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.000564)	ND(0.00113)	ND(0.00113)
P2RI-37S	09/27/10	18	19	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.000575)	ND(0.00103)	ND(0.00103)

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1,2-Dibromo-ethane (mg/kg)	1,1-Dichloro-ethane (mg/kg)	1,2-Dichloro-ethane (mg/kg)	Ethyl-benzene (mg/kg)	Hexane (mg/kg)	Isopropyl-benzene (mg/kg)	MTBE (mg/kg)	n-Propyl-benzene (mg/kg)	Styrene (mg/kg)
P2RI-38S	09/11/10	13	14	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.000558)	ND(0.00101)	ND(0.00101)
P2RI-39S	09/10/10	12	13	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.000581)	ND(0.00105)	ND(0.00105)
P2RI-41D	09/23/10	64	64	ND(0.0548)	ND(0.0548)	ND(0.0548)	0.179 J	0.501	ND(0.0548)	ND(0.0274)	0.0596 J	ND(0.0548) UJ
P2RI-41S	09/10/10	14	15	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.000564)	ND(0.00113)	ND(0.00113)
P2RI-43S	09/10/10	23	25	ND(0.0559)	ND(0.0559)	ND(0.0559)	3.47	8.72	1.05	ND(0.028)	1.9	ND(0.0559)
P2RI-44D	11/18/10	85	87	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.0137	0.0116	ND(0.00106)	ND(0.000528)	0.00211 J	ND(0.00106)
P2RI-44S	09/11/10	20	21	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.000544)	ND(0.00109)	ND(0.00109)
P2RI-44SR	05/06/11	27	29	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
P2RI-45D	05/05/11	33	35	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J	0.002 J	ND(0.001)	ND(0.0005)	ND(0.001) R	ND(0.001) UJ
P2RI-45E	05/05/11	13	14	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	0.39	ND(0.029)	0.38	ND(0.057)
P2RI-45S	09/11/10	6	7	ND(0.00113)	ND(0.00113)	ND(0.00113)	0.00113 J	0.00113 J	ND(0.00113)	ND(0.000563)	ND(0.00113)	ND(0.00113)
P2RI-45S	09/11/10	14	15	ND(0.0566)	ND(0.0566)	ND(0.0566)	2.89	1.66	0.355	ND(0.0277)	0.644	ND(0.0566)
P2RI-46D	09/12/10	65	66	ND(0.00112)	ND(0.00112)	ND(0.00112)	0.123	2.57	0.0156 J	ND(0.000558)	0.0402 J	ND(0.00112)
P2RI-46DFL	09/14/10	90	91	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.000531)	ND(0.00106)	ND(0.00106)
P2RI-46S	09/10/10	18	19	ND(0.0563)	ND(0.0563)	ND(0.0563)	3.38	2.82	0.676	ND(0.0282)	1.35	ND(0.0563)
P2RI-47DF	09/28/10	88	90.5	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.0138 J	0.0308	ND(0.00106)	ND(0.00053)	0.00318 J	ND(0.00106) UJ
P2RI-47S	09/27/10	23	25	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.000556)	ND(0.00111)	ND(0.00111)
P2RI-48S	09/29/10	8	9	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.000592)	ND(0.00118)	ND(0.00118)
P2RI-49S	09/30/10	12	14	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.000611)	ND(0.00122)	ND(0.00122)
P2RI-50S	11/10/10	8	24	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.000547)	ND(0.0011)	ND(0.0011)
P2RI-52DF	05/21/11	148.5	150	ND(0.001)	ND(0.001)	ND(0.001)	0.008	0.006	ND(0.001)	ND(0.0005)	ND(0.001) R	ND(0.001)
P2RI-52S	05/23/11	17	18	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-53S	05/24/11	12	14	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-54SL	05/21/11	95	97	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
P2RI-54SU	05/24/11	0	13	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-55DF	10/27/11	128	133	ND(0.001)	ND(0.001)	ND(0.001)	0.002 J	0.004 J	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
P2RI-55S	10/29/11	27	29	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
P2RI-56DF	10/26/11	72	74	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	0.001 J	ND(0.001) UJ	ND(0.0006)	ND(0.001) UJ	ND(0.001)
P2RI-56S	10/31/11	18	22	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
P2RI-57S	11/02/11	5	6	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0005)	ND(0.001)	ND(0.001)
P2RI-58S	11/01/11	13	14	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.0006)	ND(0.001) UJ	ND(0.001)
P2RI-59S	11/01/11	11	12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.0006)	ND(0.001) UJ	ND(0.001)
P2RI-60S	10/28/11	13	15	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-61S	11/02/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
P2RI-62S	11/02/11	4	8	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0007)	ND(0.001)	ND(0.001)
P2RI-63S	11/03/11	13.5	14.5	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
PA-5R	11/02/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0006)	ND(0.001)	ND(0.001)
Direct Exposure, Subsurface, 5/2013				7	3.3	104	1,000	57	210	8,000	340	630
Migration to Groundwater, Subsurface, 5/2013				0.00002	0.0068	0.01	10	18	6.4	0.08	9.9	1.1

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Tetrachloro-ethene (mg/kg)	Toluene (mg/kg)	1,1,1-Trichloro-ethane (mg/kg)	Trichloro-ethene (mg/kg)	1,2,4-Trimethyl-benzene (mg/kg)	1,3,5-Trimethyl-benzene (mg/kg)	m,p-Xylene (mg/kg)	o-Xylene (mg/kg)	Xylenes, Total (mg/kg)
GW-4R	10/31/11	10	11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)
GW-16R	10/11/10	8.5	9.5	ND(0.0613)	0.0851 JB	ND(0.0613)	ND(0.0613)	4.31	1.7	2.04	ND(0.0613)	2.04
GW-17R	10/31/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-20D	10/20/10	16.5	18.5	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
GW-20RS Dup	10/20/10	8	11.5	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)	ND(0.00102)
GW-20RS	10/20/10	8	11.5	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)
GW-A	11/06/10	60	60	ND(0.00106) UJ	0.0571 J	ND(0.00106)	ND(0.00106)	0.0761 J	0.0296 J	0.0814 J	0.0402 J	0.116 J
GW-C-25	11/07/10	39	39	ND(0.00106) R	0.00532 J	ND(0.00106)	ND(0.00106)	0.00426 J	0.00213 J	0.00532 J	0.00213 J	0.00745 J
GW-C-46S	09/29/10	24	25	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)
GW-C-47S Dup	09/28/10	16	17	ND(0.0547)	5.91	ND(0.0547)	ND(0.0547)	3.83	1.2	7.66	3.06	10.7
GW-C-47S	09/28/10	16	17	ND(0.0526)	7.67	ND(0.0526)	ND(0.0526)	4.27	1.31	9.2	4.05	13.1
GW-C-48	11/06/10	27	27	ND(0.00112) UJ	4.61 J	ND(0.00112)	ND(0.00112)	3.49 J	1.12 J	6.52 J	3.15 J	9.67 J
GW-CD	11/04/10	65	66	ND(0.00104) UJ	0.00624	ND(0.00104)	ND(0.00104)	ND(0.00104) UJ	ND(0.00104) UJ	0.00208 J	0.00104 J	0.00416 J
GW-CDF Dup	11/07/10	109	110	ND(0.00104)	0.0238 J	ND(0.00104)	ND(0.00104)	0.00207 J	ND(0.00104) UJ	0.00829 J	0.00415 J	0.0135 J
GW-CDF	11/07/10	109	110	ND(0.00104) UJ	0.0187 J	ND(0.00104)	ND(0.00104)	0.00311 J	ND(0.00104) UJ	0.00725 J	0.00415 J	0.0114 J
GW-CS	11/04/10	17	18	ND(0.00109)	0.00436 J	ND(0.00109)	ND(0.00109)	0.00327 J	0.00109 J	0.00872	0.00327 J	0.012
GW-D Dup	11/05/10	49	51	ND(0.00106)	0.00634 J	ND(0.00106)	ND(0.00106)	ND(0.00106) UJ	ND(0.00106) UJ	0.00211 J	0.00106 J	0.00422 J
GW-D	11/05/10	49	51	ND(0.00105) R	0.116 J	ND(0.00105)	ND(0.00105)	0.00947 J	0.00421 J	0.0263 J	0.0158 J	0.0421 J
GW-ED Dup	11/08/10	64	64	ND(0.00109) R	0.00761 J	ND(0.00109)	ND(0.00109)	0.025 J	0.0109 J	0.0207 J	0.00652 J	0.0272 J
GW-ED	11/08/10	64	64	ND(0.00109) UJ	0.00217 J	ND(0.00109)	ND(0.00109)	0.00543 J	0.00217 J	0.00543 J	0.00217 J	0.0076 J
GW-ES Dup	10/14/10	12	16	ND(0.0011)	0.0516 J	ND(0.0011)	ND(0.0011)	2.96	1.01	0.659 J	0.0527 J	0.714 J
GW-ES	10/14/10	12	16	ND(0.0011)	0.109 J	ND(0.0011)	ND(0.0011)	2.19	0.746	1.32 J	0.106 J	1.32 J
GW-FS	09/28/10	15	16	ND(0.00113)	0.00454 JB	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	0.00113 J	ND(0.00113)	0.00113 J
GW-GS	09/27/10	15	16	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
GW-GS	09/29/10	8	9	ND(0.00119)	0.00238 JB	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)	ND(0.00119)
GW-K	09/10/10	39	40	ND(0.00106)	0.00317 J	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00211 J	ND(0.00106)	0.00211 J
GW-L	05/07/11	29	31	ND(0.001)	0.002 J	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-MS	09/28/10	14	15	ND(0.0011)	0.0022 JB	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)
GW-NS Dup	12/04/10	9	10	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
GW-NS	12/04/10	9	10	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-1D	01/10/10	20	21	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)	ND(0.000998)
P2RI-1D	01/10/10	51	52	ND(0.00109) R	0.0782 J	ND(0.00109)	ND(0.00109)	0.025 J	0.0076 J	0.0521 J	0.0261 J	0.0782 J
P2RI-3D	01/09/10	79	81	ND(0.0495)	1.05	ND(0.0495)	ND(0.0495)	0.464	0.137 J	1.05	0.58	1.69
P2RI-3S	12/20/09	16	18	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-4S	12/16/09	21	25	ND(0.0613)	4.54	ND(0.0613)	ND(0.0613)	8.97	4.65	25	8.85	34.1
P2RI-4D	01/11/10	34	36	ND(0.00107)	0.0311	ND(0.00107)	ND(0.00107)	0.00215 J	0.00215 J	0.0269	0.00859	0.0354
P2RI-5S	05/06/11	11	12	ND(0.001)	0.028	ND(0.001) UJ	ND(0.001)	0.029	0.01	0.061	0.014	0.076
P2RI-6	12/16/09	24	27	ND(0.0591)	13.3	ND(0.0591)	ND(0.0591)	6.51	2.17	15.7	7.24	22.9
P2RI-8	12/17/09	33	33	ND(0.0499)	8.4	ND(0.0499)	ND(0.0499)	2.55	0.786	7.23	3.61	10.6
P2RI-9D	01/24/10	50	53	ND(0.00107)	0.0107	ND(0.00107)	ND(0.00107)	0.00427 J	0.00107 J	0.0128	0.00534 J	0.0171
P2RI-9S Dup	12/20/09	15	16	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-9S	12/20/09	15	16	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-9S	12/20/09	24	26	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)	ND(0.00129)
P2RI-10D	01/20/10	67	72	ND(0.00104) UJ	0.0886 J	ND(0.00104)	ND(0.00104)	0.00834 J	0.00313 J	0.0219 J	0.0115 J	0.0334 J
P2RI-10S	01/11/10	14	16	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-11D	01/10/10	59	60	ND(0.00104)	0.0115	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	0.00313 J	0.00104 J	0.00418 J
P2RI-11S	01/09/10	9	9	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-11S	01/09/10	19	19	ND(0.0011)	0.00221 J	ND(0.0011)	ND(0.0011)	ND(0.0011) R	ND(0.0011) R	0.00221 J	ND(0.0011)	0.00221 J
P2RI-12	01/19/10	7	12	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115) R	ND(0.00115) R	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-13 Dup	01/12/10	22	24	ND(0.0498)	10.5 J	ND(0.0498)	ND(0.0498)	1.08 J	0.39 J	3.57 J	1.84 J	5.41 J
P2RI-13	01/12/10	22	24	ND(0.0526)	6.35 J	ND(0.0526)	ND(0.0526)	2.19 J	0.679 J	5.91 J	2.96 J	8.87 J
P2RI-14	12/19/09	13	16	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	0.00221 J	ND(0.00111)	ND(0.00111)	ND(0.00111)

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Tetrachloro-ethene (mg/kg)	Toluene (mg/kg)	1,1,1-Trichloro-ethane (mg/kg)	Trichloro-ethene (mg/kg)	1,2,4-Trimethyl-benzene (mg/kg)	1,3,5-Trimethyl-benzene (mg/kg)	m,p-Xylene (mg/kg)	o-Xylene (mg/kg)	Xylenes, Total (mg/kg)
P2RI-15	01/19/10	5	10	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)
P2RI-16D	10/27/10	18	19	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-16S	12/19/09	13	16	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-17	12/19/09	12	13	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-18	12/21/09	11	12	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-18D	10/11/10	15.5	16.5	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-18SR	10/11/10	9	10	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-19D	10/26/10	22.5	22.5	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)	ND(0.00104)
P2RI-19S	12/18/09	9.5	10.5	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)	ND(0.0596)
P2RI-20	12/18/09	14.5	15.5	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-21S	12/18/09	30	32	ND(0.0522)	ND(0.0522)	ND(0.0522)	ND(0.0522)	0.374	0.113 J	0.454	0.193 J	0.646
P2RI-21S Dup	10/11/10	14	14	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)
P2RI-21S	10/11/10	14	14	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)	ND(0.00116)
P2RI-22S	12/17/09	15	15	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)	ND(0.00117)
P2RI-23D	10/26/10	22.4	22.8	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-23S	12/17/09	14	19	ND(0.00115)	0.0023 J	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	0.00115 J	ND(0.00115)	0.00115 J
P2RI-24D	11/03/10	47	48	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)	ND(0.00107)
P2RI-24S	01/19/10	7	9	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-25S	12/19/09	16	18	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-26D	10/26/10	23.8	24.8	ND(0.00116)	4.06	ND(0.00116)	ND(0.00116)	0.00348 J	0.00116 J	0.0626	0.0359	0.0997
P2RI-26S Dup	10/08/10	15.5	16.5	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)	ND(0.00115)
P2RI-26S	10/08/10	15.5	16.5	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-27D Dup	05/10/11	59	61	ND(0.001) R	0.042 J	ND(0.001)	ND(0.001)	0.009 J	0.004 J	0.017 J	0.009 J	0.026 J
P2RI-27D	05/10/11	59	61	ND(0.001) R	0.021 J	ND(0.001)	ND(0.001)	0.005 J	0.003 J	0.01 J	0.005 J	0.016 J
P2RI-27DF	05/09/11	85	86	ND(0.057)	2.9	ND(0.057) UJ	ND(0.057)	5.1	1.7	5.7	2.9	8.5
P2RI-27S	11/10/10	14.5	14.5	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-28S	11/03/11	9	10	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-29S	11/03/11	14.5	15.5	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-30S	11/03/11	5	6	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-31S	11/02/11	9.5	10.5	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-32S	11/02/11	7	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J	ND(0.001)	0.001 J
P2RI-33D	10/07/10	44	45	ND(0.00112)	0.00224 J	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	0.00224 J	ND(0.00112)	0.00224 J
P2RI-33S	09/27/10	17	18	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)	ND(0.000974)
P2RI-34D	09/25/10	42	47	ND(0.000952) UJ	0.00529 J	ND(0.000952)	ND(0.000952)	0.00423 J	0.00212 J	0.00741 J	0.00317 J	0.00952 J
P2RI-34S	09/11/10	20	21	ND(0.00109) R	0.00218 J	ND(0.00109)	ND(0.00109)	0.00654 J	0.00218 J	0.00871 J	0.00327 J	0.012 J
P2RI-35D	09/25/10	98	100.5	ND(0.00104)	0.0208	ND(0.00104)	ND(0.00104)	0.00312 J	0.00104 J	0.00937	0.0052 J	0.0146
P2RI-35S	09/11/10	19	20	ND(0.00112) R	0.0067 J	ND(0.00112) R	ND(0.00112) R	0.00446 J	0.00112 J	0.00446 J	0.00112 J	0.0067 J
P2RI-36DF	09/14/10	117	118	ND(0.00111) R	0.122 J	ND(0.00111)	ND(0.00111)	0.0277 J	0.00774 J	0.0553 J	0.0299 J	0.0852 J
P2RI-36S Dup	09/15/10	21	23	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
P2RI-36S	09/15/10	21	23	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)	ND(0.00112)
P2RI-37D	05/08/11	44	45	ND(0.001) R	0.032 J	ND(0.001) R	ND(0.001) R	0.019 J	0.008 J	0.04 J	0.02 J	0.06 J
P2RI-37S Dup	09/27/10	18	19	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
P2RI-37S	09/27/10	18	19	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)	ND(0.00103)

TABLE 4.7-3. ANALYTICAL RESULTS, VOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Tetrachloro-ethene (mg/kg)	Toluene (mg/kg)	1,1,1-Trichloro-ethane (mg/kg)	Trichloro-ethene (mg/kg)	1,2,4-Trimethyl-benzene (mg/kg)	1,3,5-Trimethyl-benzene (mg/kg)	m,p-Xylene (mg/kg)	o-Xylene (mg/kg)	Xylenes, Total (mg/kg)
P2RI-38S	09/11/10	13	14	ND(0.00101)	0.00223 J	ND(0.00101)	ND(0.00101)	ND(0.00101)	ND(0.00101)	0.00112 J	ND(0.00101)	0.00112 J
P2RI-39S	09/10/10	12	13	ND(0.00105)	0.00349 J	ND(0.00105)	ND(0.00105)	ND(0.00105)	ND(0.00105)	0.00232 J	ND(0.00105)	0.00232 J
P2RI-41D	09/23/10	64	64	ND(0.0548)	0.179 J	ND(0.0548)	ND(0.0548)	0.262 J	0.0965 J	0.429	0.203 J	0.62 J
P2RI-41S	09/10/10	14	15	ND(0.00113)	0.00226 J	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	0.00113 J	ND(0.00113)	0.00113 J
P2RI-43S	09/10/10	23	25	ND(0.0559)	4.36	ND(0.0559)	ND(0.0559)	8.84	3.02	11.2	5.82	17.9
P2RI-44D	11/18/10	85	87	ND(0.00106)	0.0581	ND(0.00106)	ND(0.00106)	0.0074 J	0.00211 J	0.0264	0.0148	0.0412
P2RI-44S	09/11/10	20	21	ND(0.00109)	0.00109 J	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
P2RI-44SR	05/06/11	27	29	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-45D	05/05/11	33	35	ND(0.001)	0.002 J	ND(0.001)	ND(0.001)	ND(0.001) R	ND(0.001) R	0.003 J	0.001 J	0.004 J
P2RI-45E	05/05/11	13	14	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	1.6	1.8	ND(0.057)	ND(0.057)	ND(0.057)
P2RI-45S	09/11/10	6	7	ND(0.00113)	0.00225 J	ND(0.00113)	ND(0.00113)	0.00113 J	ND(0.00113)	0.00225 J	ND(0.00113)	0.00225 J
P2RI-45S	09/11/10	14	15	ND(0.0566)	1.07	ND(0.0566)	ND(0.0566)	3.44	1.07	3.44	0.322	3.77
P2RI-46D	09/12/10	65	66	ND(0.00112)	1.9 J	ND(0.00112)	ND(0.00112)	0.134 J	0.0514 J	0.302 J	0.134 J	0.436
P2RI-46DFL	09/14/10	90	91	ND(0.00106)	0.00531 J	ND(0.00106)	ND(0.00106)	ND(0.00106)	ND(0.00106)	0.00106 J	ND(0.00106)	0.00106 J
P2RI-46S	09/10/10	18	19	ND(0.0563)	3.27	ND(0.0563)	ND(0.0563)	7.09	2.14	14.6	2.36	16.9
P2RI-47DF	09/28/10	88	90.5	ND(0.00106)	0.0701 JB	ND(0.00106)	ND(0.00106)	0.0138 J	0.00637 J	0.0265 J	0.0127 J	0.0393 J
P2RI-47S	09/27/10	23	25	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)	ND(0.00111)
P2RI-48S	09/29/10	8	9	ND(0.00118)	0.00118 JB	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)	ND(0.00118)
P2RI-49S	09/30/10	12	14	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
P2RI-50S	11/10/10	8	24	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)
P2RI-52DF	05/21/11	148.5	150	ND(0.001)	0.034	ND(0.001)	ND(0.001)	0.005 J	0.002 J	0.015	0.008	0.023
P2RI-52S	05/23/11	17	18	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-53S	05/24/11	12	14	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-54SL	05/21/11	95	97	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-54SU	05/24/11	0	13	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-55DF	10/27/11	128	133	ND(0.001)	0.012	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.004 J	0.002 J	0.007
P2RI-55S	10/29/11	27	29	ND(0.001)	0.001 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001 J	ND(0.001)	0.001 J
P2RI-56DF	10/26/11	72	74	ND(0.001)	0.005 J	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	0.002 J	ND(0.001) UJ	0.002 J
P2RI-56S	10/31/11	18	22	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-57S	11/02/11	5	6	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-58S	11/01/11	13	14	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-59S	11/01/11	11	12	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-60S	10/28/11	13	15	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-61S	11/02/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-62S	11/02/11	4	8	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
P2RI-63S	11/03/11	13.5	14.5	ND(0.001)	0.006 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
PA-5R	11/02/11	9	10	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Direct Exposure, Subsurface, 5/2013				8.6	5,000	870	0.44	6.2	78	59	69	600
Migration to Groundwater, Subsurface, 5/2013				0.023	10	0.7	0.018	0.21	1.2	94.74	100	200

Notes:
mg/kg - milligrams per kilogram
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Soil Standard or RBSL does not exist

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Acenaph-thene (mg/kg)	Anthracene (mg/kg)	Benzo(a)-anthracene (mg/kg)	Benzo(a)-pyrene (mg/kg)	Benzo(b)-fluor-anthene (mg/kg)	Benzo(k) fluor-anthene (mg/kg)	Bis(2-ethyl hexyl)-phthalate (mg/kg)	Chrysene (mg/kg)	Dibenz-(a,h)-acridine (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	1,2-Di-chloro-benzene (mg/kg)	1,3-Di-chloro-benzene (mg/kg)
GW-4R	10/31/11	10	11	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.077) UJ	ND(0.0038) UJ	ND(0.038) UJ	ND(0.0038)	ND(0.019) UJ	ND(0.019) UJ
GW-16R	10/11/10	8.5	9.5	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.076)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)
GW-17R	10/31/11	9	10	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.077)	ND(0.0038)	ND(0.038)	ND(0.0038)	ND(0.019)	ND(0.019)
GW-20D	10/20/10	16.5	18.5	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	0.148 J	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)
GW-20RS Dup	10/20/10	8	11.5	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0761)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)
GW-20RS	10/20/10	8	11.5	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0767)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)
GW-A	11/06/10	60	60	ND(0.0349)	ND(0.0349)	ND(0.0349)	0.00994 J	ND(0.0349)	ND(0.0349)	ND(0.0708)	ND(0.0349)	ND(0.0349)	0.00666 J	ND(0.0349)	ND(0.0349)
GW-C-25	11/07/10	39	39	ND(0.0351)	ND(0.0351)	ND(0.0351)	0.0101 J	ND(0.0351)	ND(0.0351)	ND(0.0714)	ND(0.0351)	ND(0.0351)	0.00607 J	ND(0.0351)	ND(0.0351)
GW-C-46S	09/29/10	24	25	ND(0.0354)	ND(0.0354)	ND(0.0354)	0.015 J	ND(0.0354)	ND(0.0354)	ND(0.0719)	ND(0.0354)	ND(0.0354)	ND(0.00536)	ND(0.0354)	ND(0.0354)
GW-C-47S Dup	09/28/10	16	17	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.00547)	ND(0.0361)	ND(0.0361)	ND(0.0733)	ND(0.0361)	ND(0.0361)	ND(0.00547)	ND(0.0361)	ND(0.0361)
GW-C-47S	09/28/10	16	17	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.00548)	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0361)	ND(0.0361)	ND(0.00548)	ND(0.0361)	ND(0.0361)
GW-C-48	11/06/10	27	27	ND(0.0371)	ND(0.0371)	ND(0.0371)	0.009 J	ND(0.0371)	ND(0.0371)	ND(0.0754)	ND(0.0371)	ND(0.0371)	ND(0.00562)	ND(0.0371)	ND(0.0371)
GW-CD	11/04/10	65	66	ND(0.0343)	ND(0.0343)	ND(0.0343)	0.0078 J	ND(0.0343)	ND(0.0343)	ND(0.0697)	ND(0.0343)	ND(0.0343)	ND(0.0052)	ND(0.0343)	ND(0.0343)
GW-CDF Dup	11/07/10	109	110	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.00518)	ND(0.0342)	ND(0.0342)	ND(0.0694)	ND(0.0342)	ND(0.0342)	ND(0.00518)	ND(0.0342)	ND(0.0342)
GW-CDF	11/07/10	109	110	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.00518)	ND(0.0342)	ND(0.0342)	ND(0.0694)	ND(0.0342)	ND(0.0342)	ND(0.00518)	ND(0.0342)	ND(0.0342)
GW-CS	11/04/10	17	18	ND(0.036)	ND(0.036)	ND(0.036)	0.012 J	ND(0.036)	ND(0.036)	ND(0.0731)	ND(0.036)	ND(0.036)	0.00622 J	ND(0.036)	ND(0.036)
GW-D Dup	11/05/10	49	51	ND(0.0348)	ND(0.0348)	ND(0.0348)	0.00528 J	ND(0.0348)	ND(0.0348)	ND(0.0707)	ND(0.0348)	ND(0.0348)	ND(0.00528)	ND(0.0348)	ND(0.0348)
GW-D	11/05/10	49	51	ND(0.0347)	ND(0.0347)	ND(0.0347)	0.00642 J	ND(0.0347)	ND(0.0347)	ND(0.0705)	ND(0.0347)	ND(0.0347)	ND(0.00526)	ND(0.0347)	ND(0.0347)
GW-ED Dup	11/08/10	64	64	ND(0.0359)	ND(0.0359)	ND(0.0359)	0.00663 J	ND(0.0359)	ND(0.0359)	ND(0.0728)	ND(0.0359)	ND(0.0359)	ND(0.00543)	ND(0.0359)	ND(0.0359)
GW-ED	11/08/10	64	64	ND(0.0358)	ND(0.0358)	ND(0.0358)	0.0107 J	ND(0.0358)	ND(0.0358)	ND(0.0727)	ND(0.0358)	ND(0.0358)	0.00814 J	ND(0.0358)	ND(0.0358)
GW-ES Dup	10/14/10	12	16	ND(0.0362)	ND(0.0362)	ND(0.0362)	0.0108 J	ND(0.0362)	ND(0.0362)	ND(0.0735)	ND(0.0362)	ND(0.0362)	0.00933 J	ND(0.0362) UJ	ND(0.0362)
GW-ES	10/14/10	12	16	ND(0.0362)	ND(0.0362)	ND(0.0362)	0.011 J	ND(0.0362)	ND(0.0362)	ND(0.0735)	ND(0.0362)	ND(0.0362)	ND(0.00548)	ND(0.0362) UJ	ND(0.0362)
GW-FS	09/28/10	15	16	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.00567)	ND(0.0374)	ND(0.0374)	ND(0.076)	ND(0.0374)	ND(0.0374)	ND(0.00567)	ND(0.0374)	ND(0.0374)
GW-GS	09/27/10	15	16	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0765)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)
GW-GS	09/29/10	8	9	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.00596)	ND(0.0393)	ND(0.0393)	ND(0.0799)	ND(0.0393)	ND(0.0393)	ND(0.00596)	ND(0.0393)	ND(0.0393)
GW-K	09/10/10	39	40	ND(0.0349)	ND(0.0349)	ND(0.0349)	0.018 J	ND(0.0349)	ND(0.0349)	ND(0.0708)	ND(0.0349)	ND(0.0349)	0.01 J	ND(0.0349)	ND(0.0349)
GW-L	05/07/11	29	31	ND(0.036)	ND(0.036)	ND(0.036)	0.031 J	0.041 J	ND(0.036)	ND(0.073)	ND(0.036)	ND(0.036)	ND(0.0054)	ND(0.036)	ND(0.036)
GW-MS	09/28/10	14	15	ND(0.0363)	ND(0.0363)	ND(0.0363)	ND(0.00551)	ND(0.0363)	ND(0.0363)	ND(0.0738)	ND(0.0363)	ND(0.0363)	ND(0.00551)	ND(0.0363)	ND(0.0363)
GW-NS Dup	12/04/10	9	10	ND(0.0381)	ND(0.0381)	ND(0.0381)	ND(0.00577)	ND(0.0381)	ND(0.0381)	ND(0.0774)	ND(0.0381)	ND(0.0381)	ND(0.00577)	ND(0.0381)	ND(0.0381)
GW-NS	12/04/10	9	10	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.00583)	ND(0.0385)	ND(0.0385)	ND(0.0781)	ND(0.0385)	ND(0.0385)	ND(0.00583)	ND(0.0385)	ND(0.0385)
P2RI-1D	01/10/10	20	21	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.00555)	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0366)	ND(0.0366)	ND(0.00555)	ND(0.0366)	ND(0.0366)
P2RI-1D	01/10/10	51	52	0.0423 J	ND(0.0358)	ND(0.0358)	ND(0.00543)	ND(0.0358)	ND(0.0358)	ND(0.0727)	ND(0.0358)	ND(0.0358)	0.00836 J	ND(0.0358)	ND(0.0358)
P2RI-3D	01/09/10	79	81	ND(0.0348)	ND(0.0348)	ND(0.0348)	0.00885 J	ND(0.0348)	ND(0.0348)	ND(0.0706)	ND(0.0348)	ND(0.0348)	0.00885 J	ND(0.0348)	ND(0.0348)
P2RI-3S	12/20/09	16	18	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.00556)	ND(0.0367)	ND(0.0367)	ND(0.0745)	ND(0.0367)	ND(0.0367)	ND(0.00556)	ND(0.0367)	ND(0.0367)
P2RI-4S	12/16/09	21	25	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.00568)	ND(0.0375)	ND(0.0375)	ND(0.076)	ND(0.0375)	ND(0.0375)	ND(0.00568)	ND(0.0375)	ND(0.0375)
P2RI-4D	01/11/10	34	36	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.00537)	ND(0.0354)	ND(0.0354)	ND(0.072)	ND(0.0354)	ND(0.0354)	ND(0.00537)	ND(0.0354)	ND(0.0354)
P2RI-5S	05/06/11	11	12	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0057)	ND(0.038)	ND(0.038)	ND(0.076)	ND(0.038)	ND(0.038)	ND(0.0057)	ND(0.038)	ND(0.038)
P2RI-6	12/16/09	24	27	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.00603)	ND(0.0398)	ND(0.0398)	ND(0.0808)	ND(0.0398)	ND(0.0398)	ND(0.00603)	ND(0.0398)	ND(0.0398)
P2RI-8	12/17/09	33	33	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.00531)	ND(0.0351)	ND(0.0351)	ND(0.0712)	ND(0.0351)	ND(0.0351)	ND(0.00531)	ND(0.0351)	ND(0.0351)
P2RI-9D	01/24/10	50	53	ND(0.0352)	ND(0.0352)	ND(0.0352)	0.00694 J	ND(0.0352)	ND(0.0352)	ND(0.0715)	ND(0.0352)	ND(0.0352)	0.00736 J	ND(0.0352)	ND(0.0352)
P2RI-9S Dup	12/20/09	15	16	ND(0.0386)	ND(0.0386)	ND(0.0386)	ND(0.00585)	ND(0.0386)	ND(0.0386)	ND(0.0784)	ND(0.0386)	ND(0.0386)	ND(0.00585)	ND(0.0386)	ND(0.0386)
P2RI-9S	12/20/09	15	16	ND(0.0391)	ND(0.0391)	ND(0.0391)	ND(0.00592)	ND(0.0391)	ND(0.0391)	ND(0.0793)	ND(0.0391)	ND(0.0391)	ND(0.00592)	ND(0.0391)	ND(0.0391)
P2RI-9S	12/20/09	24	26	ND(0.0426)	ND(0.0426)	ND(0.0426)	ND(0.00645)	ND(0.0426)	ND(0.0426)	ND(0.0865)	ND(0.0426)	ND(0.0426)	ND(0.00645)	ND(0.0426)	ND(0.0426)
P2RI-10D	01/20/10	67	72	ND(0.0344)	ND(0.0344)	ND(0.0344)	ND(0.00521)	ND(0.0344)	ND(0.0344)	ND(0.0699)	ND(0.0344)	ND(0.0344)	ND(0.00521)	ND(0.0344)	ND(0.0344)
P2RI-10S	01/11/10	14	16	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.00561)	ND(0.037)	ND(0.037)	ND(0.0751)	ND(0.037)	ND(0.037)	ND(0.00561)	ND(0.037)	ND(0.037)

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Acenaph-thene (mg/kg)	Anthracene (mg/kg)	Benzo(a)-anthracene (mg/kg)	Benzo(a)-pyrene (mg/kg)	Benzo(b)-fluor-anthene (mg/kg)	Benzo(k) fluor-anthene (mg/kg)	Bis(2-ethyl hexyl)-phthalate (mg/kg)	Chrysene (mg/kg)	Dibenz-(a,h)-acridine (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	1,2-Di-chloro-benzene (mg/kg)	1,3-Di-chloro-benzene (mg/kg)
P2RI-11D	01/10/10	59	60	ND(0.0345)	ND(0.0345)	ND(0.0345)	0.0167 J	ND(0.0345)	ND(0.0345)	ND(0.07)	ND(0.0345)	ND(0.0345)	0.0146 J	ND(0.0345)	ND(0.0345)
P2RI-11S	01/09/10	9	9	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.0056)	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.037)	ND(0.0056)	ND(0.037)	ND(0.037)
P2RI-11S	01/09/10	19	19	ND(0.0365)	ND(0.0365)	ND(0.0365)	0.00685 J	ND(0.0365)	ND(0.0365)	ND(0.074)	ND(0.0365)	ND(0.0365)	ND(0.00552)	ND(0.0365)	ND(0.0365)
P2RI-12	01/19/10	7	12	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.00575)	ND(0.038)	ND(0.038)	ND(0.0771)	ND(0.038)	ND(0.038)	ND(0.00575)	ND(0.038)	ND(0.038)
P2RI-13 Dup	01/12/10	22	24	ND(0.0357)	ND(0.0357)	ND(0.0357)	0.0079 J	ND(0.0357)	ND(0.0357)	ND(0.0725)	ND(0.0357)	ND(0.0357)	0.00541 J	ND(0.0357)	ND(0.0357)
P2RI-13	01/12/10	22	24	ND(0.0361)	ND(0.0361)	ND(0.0361)	0.011 J	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0361)	ND(0.0361)	0.00997 J	ND(0.0361)	ND(0.0361)
P2RI-14	12/19/09	13	16	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.00554)	ND(0.0365)	ND(0.0365)	ND(0.0742)	ND(0.0365)	ND(0.0365)	ND(0.00554)	ND(0.0365)	ND(0.0365)
P2RI-15	01/19/10	5	10	ND(0.0361)	ND(0.0361)	ND(0.0361)	0.00942 J	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0361)	ND(0.0361)	0.008 J	ND(0.0361)	ND(0.0361)
P2RI-16D	10/27/10	18	19	ND(0.0368)	ND(0.0368)	ND(0.0368)	ND(0.00557)	ND(0.0368)	ND(0.0368)	ND(0.0747)	ND(0.0368)	ND(0.0368)	ND(0.00557)	ND(0.0368)	ND(0.0368)
P2RI-16S	12/19/09	13	16	ND(0.0371)	ND(0.0371)	ND(0.0371)	ND(0.00562)	ND(0.0371)	ND(0.0371)	ND(0.0754)	ND(0.0371)	ND(0.0371)	ND(0.00562)	ND(0.0371)	ND(0.0371)
P2RI-17	12/19/09	12	13	ND(0.0379)	ND(0.0379)	ND(0.0379)	ND(0.00574)	ND(0.0379)	ND(0.0379)	ND(0.0769)	ND(0.0379)	ND(0.0379)	ND(0.00574)	ND(0.0379)	ND(0.0379)
P2RI-18	12/21/09	11	12	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.00583)	ND(0.0385)	ND(0.0385)	ND(0.0782)	ND(0.0385)	ND(0.0385)	ND(0.00583)	ND(0.0385)	ND(0.0385)
P2RI-18D	10/11/10	15.5	16.5	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)	0.0991 J	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)
P2RI-18SR	10/11/10	9	10	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0767)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)
P2RI-19D	10/26/10	22.5	22.5	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.00579)	ND(0.0382)	ND(0.0382)	ND(0.0776)	ND(0.0382)	ND(0.0382)	ND(0.00579)	ND(0.0382)	ND(0.0382)
P2RI-19S	12/18/09	9.5	10.5	ND(0.0418)	ND(0.0418)	ND(0.0418)	ND(0.00634)	ND(0.0418)	ND(0.0418)	ND(0.0849)	ND(0.0418)	ND(0.0418)	ND(0.00634)	ND(0.0418)	ND(0.0418)
P2RI-20	12/18/09	14.5	15.5	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.00588)	ND(0.0388)	ND(0.0388)	ND(0.0787)	ND(0.0388)	ND(0.0388)	ND(0.00588)	ND(0.0388)	ND(0.0388)
P2RI-21S	12/18/09	30	32	ND(0.0374)	ND(0.0374)	ND(0.0374)	0.0136 J	ND(0.0374)	ND(0.0374)	ND(0.076)	ND(0.0374)	ND(0.0374)	ND(0.00567)	ND(0.0374)	ND(0.0374)
P2RI-21S Dup	10/11/10	14	14	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0775)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)
P2RI-21S	10/11/10	14	14	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0779)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)
P2RI-22S	12/17/09	15	15	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.00583)	ND(0.0385)	ND(0.0385)	ND(0.0781)	ND(0.0385)	ND(0.0385)	ND(0.00583)	ND(0.0385)	ND(0.0385)
P2RI-23D	10/26/10	22.4	22.8	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.00588)	ND(0.0388)	ND(0.0388)	ND(0.0787)	ND(0.0388)	ND(0.0388)	0.00611 J	ND(0.0388)	ND(0.0388)
P2RI-23S	12/17/09	14	19	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.00576)	ND(0.038)	ND(0.038)	ND(0.0772)	ND(0.038)	ND(0.038)	ND(0.00576)	ND(0.038)	ND(0.038)
P2RI-24D	11/03/10	47	48	ND(0.0353)	ND(0.0353)	ND(0.0353)	0.0118 J	ND(0.0353)	ND(0.0353)	ND(0.0716)	ND(0.0353)	ND(0.0353)	0.00577 J	ND(0.0353)	ND(0.0353)
P2RI-24S	01/19/10	7	9	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.00564)	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0372)	ND(0.0372)	ND(0.00564)	ND(0.0372)	ND(0.0372)
P2RI-25S	12/19/09	16	18	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.00566)	ND(0.0374)	ND(0.0374)	ND(0.0759)	ND(0.0374)	ND(0.0374)	ND(0.00566)	ND(0.0374)	ND(0.0374)
P2RI-26D	10/26/10	23.8	24.8	ND(0.0382)	ND(0.0382)	ND(0.0382)	0.00695 J	ND(0.0382)	ND(0.0382)	ND(0.0776)	ND(0.0382)	ND(0.0382)	0.00765 J	ND(0.0382)	ND(0.0382)
P2RI-26S Dup	10/08/10	15.5	16.5	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0772)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
P2RI-26S	10/08/10	15.5	16.5	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)
P2RI-27D Dup	05/10/11	59	61	ND(0.035)	ND(0.035)	ND(0.035)	0.012 J	ND(0.035)	ND(0.035)	ND(0.07)	ND(0.035)	ND(0.035)	0.0057 J	ND(0.035)	ND(0.035)
P2RI-27D	05/10/11	59	61	ND(0.035)	ND(0.035)	ND(0.035)	0.017 J	ND(0.035)	ND(0.035)	ND(0.07)	ND(0.035)	ND(0.035)	0.011 J	ND(0.035)	ND(0.035)
P2RI-27DF	05/09/11	85	86	ND(0.036)	ND(0.036)	ND(0.036)	0.008 J	ND(0.036)	ND(0.036)	ND(0.071)	ND(0.036)	ND(0.036)	0.0069 J	ND(0.036)	ND(0.036)
P2RI-27S	11/10/10	14.5	14.5	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.0056)	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.037)	ND(0.0056)	ND(0.037)	ND(0.037)
P2RI-28S	11/03/11	9	10	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.085)	ND(0.0042)	ND(0.042)	ND(0.0042)	ND(0.021)	ND(0.021)
P2RI-29S	11/03/11	14.5	15.5	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.077)	ND(0.0038)	ND(0.038)	ND(0.0038)	ND(0.019)	ND(0.019)
P2RI-30S	11/03/11	5	6	ND(0.0039)	ND(0.0039)	0.068	ND(0.0039)	ND(0.0039)	ND(0.0039)	ND(0.079)	ND(0.0039)	ND(0.039)	ND(0.0039)	ND(0.02)	ND(0.02)
P2RI-31S	11/02/11	9.5	10.5	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.079)	0.16	ND(0.04)	ND(0.004)	ND(0.02)	ND(0.02)
P2RI-32S	11/02/11	7	10	ND(0.041)	0.091 J	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.82)	0.25	ND(0.41)	ND(0.041)	ND(0.2)	ND(0.2)
P2RI-33D	10/07/10	44	45	ND(0.0369)	ND(0.0369)	ND(0.0369)	0.0157 J	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.0369)	ND(0.00559)	ND(0.0369)	ND(0.0369)
P2RI-33S	09/27/10	17	18	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0725)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)
P2RI-34D	09/25/10	42	47	0.073 J	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349)	0.0931 J	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349) R	ND(0.0349) R
P2RI-34S	09/11/10	20	21	ND(0.0359)	ND(0.0359)	ND(0.0359)	0.012 J	ND(0.0359)	ND(0.0359)	ND(0.073)	ND(0.0359)	ND(0.0359)	ND(0.00545)	ND(0.0359)	ND(0.0359)
P2RI-35D	09/25/10	98	100.5	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0697)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0343) R	ND(0.0343) R
P2RI-35S	09/11/10	19	20	ND(0.0368)	ND(0.0368)	ND(0.0368)	0.0123 J	ND(0.0368)	ND(0.0368)	ND(0.0748)	ND(0.0368)	ND(0.0368)	0.0134 J	ND(0.0368)	ND(0.0368)
P2RI-36DF	09/14/10	117	118	0.133 J	0.0575 J	ND(0.0365)	0.0454 J	0.0498 J	ND(0.0365)	ND(0.0741)	0.0575 J	ND(0.0365)	ND(0.00553)	ND(0.0365)	ND(0.0365)

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Acenaph-thene (mg/kg)	Anthracene (mg/kg)	Benzo(a)-anthracene (mg/kg)	Benzo(a)-pyrene (mg/kg)	Benzo(b)-fluor-anthene (mg/kg)	Benzo(k) fluor-anthene (mg/kg)	Bis(2-ethyl hexyl)-phthalate (mg/kg)	Chrysene (mg/kg)	Dibenz-(a,h)-acridine (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	1,2-Di-chloro-benzene (mg/kg)	1,3-Di-chloro-benzene (mg/kg)
P2RI-36S Dup	09/15/10	21	23	ND(0.0361)	ND(0.0361)	ND(0.0361)	0.0251 J	ND(0.0361)	ND(0.0361)	ND(0.0732)	ND(0.0361)	ND(0.0361)	0.0175 J	ND(0.0361)	ND(0.0361)
P2RI-36S	09/15/10	21	23	ND(0.0371)	ND(0.0371)	ND(0.0371)	0.0236 J	ND(0.0371)	ND(0.0371)	ND(0.0753)	ND(0.0371)	ND(0.0371)	ND(0.00562)	ND(0.0371)	ND(0.0371)
P2RI-37D	05/08/11	44	45	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.0058)	ND(0.039)	ND(0.039)	ND(0.077)	ND(0.039)	ND(0.039)	0.0096 J	ND(0.039)	ND(0.039)
P2RI-37S Dup	09/27/10	18	19	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0756)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)
P2RI-37S	09/27/10	18	19	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0771)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
P2RI-38S	09/11/10	13	14	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.00559)	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.0369)	ND(0.00559)	ND(0.0369)	ND(0.0369)
P2RI-39S	09/10/10	12	13	ND(0.0384)	ND(0.0384)	ND(0.0384)	0.00709 J	ND(0.0384)	ND(0.0384)	ND(0.0779)	ND(0.0384)	ND(0.0384)	0.00744 J	ND(0.0384)	ND(0.0384)
P2RI-41D	09/23/10	64	64	0.0751 J	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0799)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0393)
P2RI-41S	09/10/10	14	15	ND(0.0373)	ND(0.0373)	ND(0.0373)	ND(0.00565)	ND(0.0373)	ND(0.0373)	ND(0.0757)	ND(0.0373)	ND(0.0373)	ND(0.00565)	ND(0.0373)	ND(0.0373)
P2RI-43S	09/10/10	23	25	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.00559)	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.0369)	ND(0.00559)	ND(0.0369)	ND(0.0369)
P2RI-44D	11/18/10	85	87	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349) R	ND(0.0349) R	ND(0.0349) R	ND(0.0708)	ND(0.0349)	ND(0.0349) R	ND(0.0349) R	ND(0.0349)	ND(0.0349)
P2RI-44S	09/11/10	20	21	ND(0.0359)	ND(0.0359)	ND(0.0359)	0.00861 J	ND(0.0359)	ND(0.0359)	ND(0.073)	ND(0.0359)	ND(0.0359)	0.00697 J	ND(0.0359)	ND(0.0359)
P2RI-44SR	05/06/11	27	29	ND(0.036)	ND(0.036)	ND(0.036)	0.0087 J	ND(0.036)	ND(0.036)	ND(0.072)	ND(0.036)	ND(0.036)	ND(0.0054)	ND(0.036)	ND(0.036)
P2RI-45D	05/05/11	33	35	ND(0.035)	ND(0.035)	ND(0.035)	0.013 J	ND(0.035)	ND(0.035)	ND(0.071)	ND(0.035)	ND(0.035)	ND(0.0053)	ND(0.035) UJ	ND(0.035) UJ
P2RI-45E	05/05/11	13	14	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.0056)	ND(0.037)	ND(0.037)	ND(0.075)	0.16 J	ND(0.037)	ND(0.0056)	ND(0.037)	ND(0.037)
P2RI-45S	09/11/10	6	7	ND(0.0372)	ND(0.0372)	ND(0.0372)	0.0304 J	ND(0.0372)	ND(0.0372)	ND(0.0755)	0.089 J	ND(0.0372)	ND(0.00563)	ND(0.0372)	ND(0.0372)
P2RI-45S	09/11/10	14	15	ND(0.0366)	ND(0.0366)	ND(0.0366)	0.0122 J	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0366)	ND(0.0366)	0.0122 J	ND(0.0366)	ND(0.0366)
P2RI-46D	09/12/10	65	66	ND(0.0369)	ND(0.0369)	ND(0.0369)	0.0145 J	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.0369)	0.00916 J	ND(0.0369)	ND(0.0369)
P2RI-46DFL	09/14/10	90	91	ND(0.0351)	ND(0.0351)	ND(0.0351)	0.00584 J	ND(0.0351)	ND(0.0351)	0.0829 J	ND(0.0351)	ND(0.0351)	ND(0.00531)	ND(0.0351)	ND(0.0351)
P2RI-46S	09/10/10	18	19	ND(0.0372)	ND(0.0372)	ND(0.0372)	0.0107 J	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0372)	ND(0.0372)	0.0089 J	ND(0.0372)	ND(0.0372)
P2RI-47DF	09/28/10	88	90.5	ND(0.035)	ND(0.035)	ND(0.035)	0.017 J	ND(0.035)	ND(0.035)	ND(0.0711)	ND(0.035)	ND(0.035)	0.0127 J	ND(0.035) R	ND(0.035) R
P2RI-47S	09/27/10	23	25	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0745)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)
P2RI-48S	09/29/10	8	9	ND(0.0391)	ND(0.0391)	ND(0.0391)	ND(0.00592)	ND(0.0391)	ND(0.0391)	ND(0.0794)	ND(0.0391)	ND(0.0391)	ND(0.00592)	ND(0.0391)	ND(0.0391)
P2RI-49S	09/30/10	12	14	ND(0.0404)	ND(0.0404)	ND(0.0404)	ND(0.00612)	ND(0.0404)	ND(0.0404)	ND(0.082)	ND(0.0404)	ND(0.0404)	ND(0.00612)	ND(0.0404)	ND(0.0404)
P2RI-50S	11/10/10	8	24	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.00548)	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0361)	ND(0.0361)	ND(0.00548)	ND(0.0361)	ND(0.0361)
P2RI-52DF	05/21/11	148.5	150	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.0053)	ND(0.035)	ND(0.035)	ND(0.071)	ND(0.035)	ND(0.035)	ND(0.0053)	ND(0.035)	ND(0.035)
P2RI-52S	05/23/11	17	18	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.0054)	ND(0.036)	ND(0.036)	ND(0.072)	ND(0.036)	ND(0.036)	ND(0.0054)	ND(0.036)	ND(0.036)
P2RI-53S	05/24/11	12	14	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.0062)	ND(0.041)	ND(0.041)	ND(0.082)	ND(0.041)	ND(0.041)	ND(0.0062)	ND(0.041)	ND(0.041)
P2RI-54SL	05/21/11	95	97	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0057)	ND(0.038)	ND(0.038)	ND(0.076)	ND(0.038)	ND(0.038)	ND(0.0057)	ND(0.038)	ND(0.038)
P2RI-54SU	05/24/11	0	13	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.0061)	ND(0.041)	ND(0.041)	ND(0.082)	ND(0.041)	ND(0.041)	ND(0.0061)	ND(0.041)	ND(0.041)
P2RI-55DF	10/27/11	128	133	0.0082 J	ND(0.0035)	ND(0.0035)	ND(0.0035)	ND(0.0035)	ND(0.0035)	ND(0.069)	0.0037 J	ND(0.035)	ND(0.0035)	ND(0.017)	ND(0.017)
P2RI-55S	10/29/11	27	29	0.008 J	ND(0.0035)	0.013 J	0.016 J	0.02	0.0066 J	0.096 J	0.018 J	ND(0.035)	0.0053 J	ND(0.018)	ND(0.018)
P2RI-56DF	10/26/11	72	74	0.0059 J	ND(0.0038) UJ	0.0045 J	0.0049 J	0.0054 J	ND(0.0038)	ND(0.076)	0.004 J	ND(0.038)	ND(0.0038)	ND(0.019)	ND(0.019)
P2RI-56S	10/31/11	18	22	ND(0.0037)	ND(0.0037)	0.0068 J	0.0057 J	0.016 J	ND(0.0037)	ND(0.075)	0.014 J	ND(0.038)	0.0043 J	ND(0.019)	ND(0.019)
P2RI-57S	11/02/11	5	6	ND(0.0037)	ND(0.0037)	ND(0.0037)	ND(0.0037)	ND(0.0037)	ND(0.0037)	ND(0.075)	ND(0.0037)	ND(0.037)	ND(0.0037)	ND(0.019)	ND(0.019)
P2RI-58S	11/01/11	13	14	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.076) UJ	ND(0.0038) UJ	ND(0.038) UJ	ND(0.0038)	ND(0.019) UJ	ND(0.019) UJ
P2RI-59S	11/01/11	11	12	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.0038)	ND(0.0038)	ND(0.0038)	ND(0.077) UJ	ND(0.0038) UJ	ND(0.038) UJ	ND(0.0038)	ND(0.019) UJ	ND(0.019) UJ
P2RI-60S	10/28/11	13	15	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.0042)	ND(0.084)	ND(0.0042)	ND(0.042)	ND(0.0042)	ND(0.021)	ND(0.021)
P2RI-61S	11/02/11	9	10	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.083)	ND(0.0041)	ND(0.041)	ND(0.0041)	ND(0.021)	ND(0.021)
P2RI-62S	11/02/11	4	8	ND(0.0046)	ND(0.0046) UJ	ND(0.0046) UJ	ND(0.0046) UJ	ND(0.0046) UJ	ND(0.0046) UJ	ND(0.092) UJ	ND(0.0046) UJ	ND(0.046) UJ	ND(0.0046) UJ	ND(0.023)	ND(0.023)
P2RI-63S	11/03/11	13.5	14.5	ND(0.0039)	ND(0.0039)	ND(0.0039)	ND(0.0039)	ND(0.0039)	ND(0.0039)	ND(0.079)	ND(0.0039)	ND(0.039)	ND(0.0039)	ND(0.02)	ND(0.02)
PA-5R	11/02/11	9	10	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.0041)	ND(0.081)	ND(0.0041)	ND(0.041)	ND(0.0041)	ND(0.02)	ND(0.02)
Direct Exposure, Subsurface, 5/2013				4,000	20,000	50	5	50	500	35	5,000	NA	5	190	NA
Migration to Groundwater, Subsurface, 5/2013				200	4,000	10	4	50	500	14	2,000	NA	7	5.8	NA

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1,4-Di-chloro-benzene (mg/kg)	Diethyl-phthalate (mg/kg)	2,4-Dimethyl-phenol (mg/kg)	Dimethyl Phthalate (mg/kg)	Di-n-butyl-phthalate (mg/kg)	2,4-Dinitro-phenol (mg/kg)	1,4-Dioxane (mg/kg)	Fluor-anthene (mg/kg)	Fluorene (mg/kg)	Indene (mg/kg)	Indeno-(1,2,3-cd) pyrene (mg/kg)	Tetraethyl Lead (mg/kg)
GW-4R	10/31/11	10	11	ND(0.019) UJ	ND(0.077) UJ	ND(0.019) UJ	ND(0.077) UJ	ND(0.077) UJ	ND(0.38) UJ	ND(0.11)	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.038)	ND(0.0038)	ND(0.039)
GW-16R	10/11/10	8.5	9.5	ND(0.0375)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.76)	ND(0.114)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)
GW-17R	10/31/11	9	10	ND(0.019)	ND(0.077)	ND(0.019)	ND(0.077)	ND(0.077)	ND(0.38) UJ	ND(0.12)	ND(0.0038)	ND(0.0038)	ND(0.038)	ND(0.0038)	ND(0.039)
GW-20D	10/20/10	16.5	18.5	ND(0.0375)	ND(0.0761)	ND(0.0761)	ND(0.0761)	ND(0.0761)	ND(0.761)	ND(0.114)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)
GW-20RS Dup	10/20/10	8	11.5	ND(0.0375)	ND(0.0761)	ND(0.0761)	ND(0.0761)	ND(0.0761)	ND(0.761)	ND(0.114)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)
GW-20RS	10/20/10	8	11.5	ND(0.0378)	ND(0.0767)	ND(0.0767)	ND(0.0767)	ND(0.0767)	ND(0.767)	ND(0.115)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)
GW-A	11/06/10	60	60	ND(0.0349)	ND(0.0708)	ND(0.0708)	ND(0.0708)	ND(0.0708)	ND(0.708)	ND(0.106) UJ	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349)
GW-C-25	11/07/10	39	39	ND(0.0351)	ND(0.0714)	ND(0.0714)	ND(0.0714)	ND(0.0714)	ND(0.714)	ND(0.106) UJ	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.0351)
GW-C-46S	09/29/10	24	25	ND(0.0354)	ND(0.0719)	ND(0.0719)	ND(0.0719)	ND(0.0719)	ND(0.719)	ND(0.107)	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.0354)
GW-C-47S Dup	09/28/10	16	17	ND(0.0361)	ND(0.0733)	ND(0.0733)	ND(0.0733)	ND(0.0733)	ND(0.733)	ND(0.109)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)
GW-C-47S	09/28/10	16	17	ND(0.0361)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.734)	ND(0.11)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)
GW-C-48	11/06/10	27	27	ND(0.0371)	ND(0.0754)	ND(0.0754)	ND(0.0754)	ND(0.0754)	ND(0.754)	ND(0.112) UJ	ND(0.0371)	ND(0.0371)	ND(0.0371)	ND(0.0371)	ND(0.0371)
GW-CD	11/04/10	65	66	ND(0.0343)	ND(0.0697)	ND(0.0697)	ND(0.0697)	ND(0.0697)	ND(0.697)	ND(0.104)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0343)
GW-CDF Dup	11/07/10	109	110	ND(0.0342)	ND(0.0694)	ND(0.0694)	ND(0.0694)	ND(0.0694)	ND(0.694)	ND(0.104) UJ	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.0342) UJ
GW-CDF	11/07/10	109	110	ND(0.0342)	ND(0.0694)	ND(0.0694)	ND(0.0694)	ND(0.0694)	ND(0.694)	ND(0.104) UJ	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.0342)	0.145 J
GW-CS	11/04/10	17	18	ND(0.036)	ND(0.0731)	ND(0.0731)	ND(0.0731)	ND(0.0731)	ND(0.731)	ND(0.109)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
GW-D Dup	11/05/10	49	51	ND(0.0348)	ND(0.0707)	ND(0.0707)	ND(0.0707)	ND(0.0707)	ND(0.707)	ND(0.106) UJ	ND(0.0348)	ND(0.0348)	ND(0.0348)	ND(0.0348)	ND(0.0348)
GW-D	11/05/10	49	51	ND(0.0347)	ND(0.0705)	ND(0.0705)	ND(0.0705)	ND(0.0705)	ND(0.705)	ND(0.105) UJ	ND(0.0347)	ND(0.0347)	ND(0.0347)	ND(0.0347)	ND(0.0347)
GW-ED Dup	11/08/10	64	64	ND(0.0359)	ND(0.0728)	ND(0.0728)	ND(0.0728)	ND(0.0728)	ND(0.728)	ND(0.109) UJ	ND(0.0359)	ND(0.0359)	ND(0.0359)	ND(0.0359)	ND(0.0359)
GW-ED	11/08/10	64	64	ND(0.0358)	ND(0.0727)	ND(0.0727)	ND(0.0727)	ND(0.0727)	ND(0.727)	ND(0.109) UJ	ND(0.0358)	ND(0.0358)	ND(0.0358)	ND(0.0358)	ND(0.0358)
GW-ES Dup	10/14/10	12	16	ND(0.0362)	ND(0.0735)	ND(0.0735)	ND(0.0735)	ND(0.0735)	ND(0.735)	ND(0.11)	ND(0.0362)	ND(0.0362)	ND(0.0362)	ND(0.0362)	ND(0.0362)
GW-ES	10/14/10	12	16	ND(0.0362)	ND(0.0735)	ND(0.0735)	ND(0.0735)	ND(0.0735)	ND(0.735)	ND(0.11)	ND(0.0362)	ND(0.0362)	ND(0.0362)	ND(0.0362)	ND(0.0362)
GW-FS	09/28/10	15	16	ND(0.0374)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.76)	ND(0.113)	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.0374)
GW-GS	09/27/10	15	16	ND(0.0377)	ND(0.0765)	ND(0.0765)	ND(0.0765)	ND(0.0765)	ND(0.765) R	ND(0.114)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0377)
GW-GS	09/29/10	8	9	ND(0.0393)	ND(0.0799)	ND(0.0799)	ND(0.0799)	ND(0.0799)	ND(0.799)	ND(0.119)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0393)
GW-K	09/10/10	39	40	ND(0.0349)	ND(0.0708)	ND(0.0708)	ND(0.0708)	ND(0.0708)	ND(0.708)	ND(0.106)	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349)
GW-L	05/07/11	29	31	ND(0.036)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.73) UJ	ND(0.11)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
GW-MS	09/28/10	14	15	ND(0.0363)	ND(0.0738)	ND(0.0738)	ND(0.0738)	ND(0.0738)	ND(0.738)	ND(0.11)	ND(0.0363)	ND(0.0363)	ND(0.0363)	ND(0.0363)	ND(0.0363)
GW-NS Dup	12/04/10	9	10	ND(0.0381)	ND(0.0774)	ND(0.0774)	ND(0.0774)	ND(0.0774)	ND(0.774)	ND(0.115)	ND(0.0381)	ND(0.0381)	ND(0.0381)	ND(0.0381)	ND(0.0381)
GW-NS	12/04/10	9	10	ND(0.0385)	ND(0.0781)	ND(0.0781)	ND(0.0781)	ND(0.0781)	ND(0.781)	ND(0.117)	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0385)
P2RI-1D	01/10/10	20	21	ND(0.0366)	ND(0.0744)	ND(0.0744)	ND(0.0744)	ND(0.0744)	ND(0.744)	ND(0.111)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)
P2RI-1D	01/10/10	51	52	ND(0.0358)	ND(0.0727)	ND(0.0727)	ND(0.0727)	ND(0.0727)	ND(0.727)	ND(0.109)	ND(0.0358)	0.0413 J	ND(0.0358)	ND(0.0358)	ND(0.0358)
P2RI-3D	01/09/10	79	81	ND(0.0348)	ND(0.0706)	ND(0.0706)	ND(0.0706)	ND(0.0706)	ND(0.706)	ND(0.105)	ND(0.0348)	ND(0.0348)	ND(0.0348)	ND(0.0348)	ND(0.0348)
P2RI-3S	12/20/09	16	18	ND(0.0367)	ND(0.0745)	ND(0.0745)	ND(0.0745)	ND(0.0745)	ND(0.745)	ND(0.111)	ND(0.0367)	ND(0.0367)	ND(0.0367) UJ	ND(0.0367)	ND(0.0367)
P2RI-4S	12/16/09	21	25	ND(0.0375)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.76)	ND(0.114)	ND(0.0375)	ND(0.0375)	ND(0.0375) UJ	ND(0.0375)	ND(0.0375)
P2RI-4D	01/11/10	34	36	ND(0.0354)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.72)	ND(0.107)	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.0354)
P2RI-5S	05/06/11	11	12	ND(0.038)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.76) UJ	ND(0.11)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
P2RI-6	12/16/09	24	27	ND(0.0398)	ND(0.0808)	ND(0.0808)	ND(0.0808)	ND(0.0808)	ND(0.808)	ND(0.121)	ND(0.0398)	ND(0.0398)	ND(0.0398) UJ	ND(0.0398)	ND(0.0398)
P2RI-8	12/17/09	33	33	ND(0.0351)	ND(0.0712)	ND(0.0712)	ND(0.0712)	ND(0.0712)	ND(0.712) UJ	ND(0.106) UJ	ND(0.0351)	ND(0.0351)	ND(0.0351) UJ	ND(0.0351)	ND(0.0351)
P2RI-9D	01/24/10	50	53	ND(0.0352)	ND(0.0715)	ND(0.0715)	ND(0.0715)	ND(0.0715)	ND(0.715) UJ	ND(0.107) UJ	ND(0.0352)	ND(0.0352)	ND(0.0352)	ND(0.0352)	ND(0.0352)
P2RI-9S Dup	12/20/09	15	16	ND(0.0386)	ND(0.0784)	ND(0.0784)	ND(0.0784)	ND(0.0784)	ND(0.784)	ND(0.117)	ND(0.0386)	ND(0.0386)	ND(0.0386) UJ	ND(0.0386)	ND(0.0386)
P2RI-9S	12/20/09	15	16	ND(0.0391)	ND(0.0793)	ND(0.0793)	ND(0.0793)	ND(0.0793)	ND(0.793)	ND(0.118)	ND(0.0391)	ND(0.0391)	ND(0.0391) UJ	ND(0.0391)	ND(0.0391)
P2RI-9S	12/20/09	24	26	ND(0.0426)	ND(0.0865)	ND(0.0865)	ND(0.0865)	ND(0.0865)	ND(0.865)	ND(0.129)	ND(0.0426)	ND(0.0426)	ND(0.0426) UJ	ND(0.0426)	ND(0.0426)
P2RI-10D	01/20/10	67	72	ND(0.0344)	ND(0.0699)	ND(0.0699)	ND(0.0699)	ND(0.0699)	ND(0.699) R	ND(0.104)	ND(0.0344)	ND(0.0344)	ND(0.0344) UJ	ND(0.0344)	ND(0.0344)
P2RI-10S	01/11/10	14	16	ND(0.037)	ND(0.0751)	ND(0.0751)	ND(0.0751)	ND(0.0751)	ND(0.751)	ND(0.112)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1,4-Di-chloro-benzene (mg/kg)	Diethyl-phthalate (mg/kg)	2,4-Dimethyl-phenol (mg/kg)	Dimethyl Phthalate (mg/kg)	Di-n-butyl-phthalate (mg/kg)	2,4-Dinitro-phenol (mg/kg)	1,4-Dioxane (mg/kg)	Fluor-anthene (mg/kg)	Fluorene (mg/kg)	Indene (mg/kg)	Indeno-(1,2,3-cd) pyrene (mg/kg)	Tetraethyl Lead (mg/kg)
P2RI-11D	01/10/10	59	60	ND(0.0345)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.7)	ND(0.104)	ND(0.0345)	ND(0.0345)	ND(0.0345)	ND(0.0345)	ND(0.0345)
P2RI-11S	01/09/10	9	9	ND(0.037)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.75)	ND(0.112)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
P2RI-11S	01/09/10	19	19	ND(0.0365)	ND(0.074)	ND(0.074)	ND(0.074)	ND(0.074)	ND(0.74)	ND(0.11)	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.0365)
P2RI-12	01/19/10	7	12	ND(0.038)	ND(0.0771)	ND(0.0771)	ND(0.0771)	ND(0.0771)	ND(0.771) UJ	ND(0.115)	ND(0.038)	ND(0.038)	ND(0.038) UJ	ND(0.038)	ND(0.038)
P2RI-13 Dup	01/12/10	22	24	ND(0.0357)	ND(0.0725)	ND(0.0725)	ND(0.0725)	ND(0.0725)	ND(0.725)	ND(0.108)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)
P2RI-13	01/12/10	22	24	ND(0.0361)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.734)	ND(0.11)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)
P2RI-14	12/19/09	13	16	ND(0.0365)	ND(0.0742)	ND(0.0742)	ND(0.0742)	ND(0.0742)	ND(0.742)	ND(0.111)	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.0365) UJ
P2RI-15	01/19/10	5	10	ND(0.0361)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.734) UJ	ND(0.11)	ND(0.0361)	ND(0.0361)	ND(0.0361) UJ	ND(0.0361)	ND(0.0361)
P2RI-16D	10/27/10	18	19	ND(0.0368)	ND(0.0747)	ND(0.0747)	ND(0.0747)	ND(0.0747)	ND(0.747)	ND(0.111)	ND(0.0368)	ND(0.0368)	ND(0.0368)	ND(0.0368)	ND(0.0368)
P2RI-16S	12/19/09	13	16	ND(0.0371)	ND(0.0754)	ND(0.0754)	ND(0.0754)	ND(0.0754)	ND(0.754)	ND(0.112)	ND(0.0371)	ND(0.0371)	ND(0.0371) UJ	ND(0.0371)	ND(0.0371)
P2RI-17	12/19/09	12	13	ND(0.0379)	ND(0.0769)	ND(0.0769)	ND(0.0769)	ND(0.0769)	ND(0.769)	ND(0.115)	ND(0.0379)	ND(0.0379)	ND(0.0379) UJ	ND(0.0379)	ND(0.0379)
P2RI-18	12/21/09	11	12	ND(0.0385)	ND(0.0782)	ND(0.0782)	ND(0.0782)	ND(0.0782)	ND(0.782)	ND(0.117)	ND(0.0385)	ND(0.0385)	ND(0.0385) UJ	ND(0.0385)	ND(0.0385)
P2RI-18D	10/11/10	15.5	16.5	ND(0.0389)	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.79)	ND(0.118)	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.0389)
P2RI-18SR	10/11/10	9	10	ND(0.0378)	ND(0.0767)	ND(0.0767)	ND(0.0767)	ND(0.0767)	ND(0.767)	ND(0.115)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0378)
P2RI-19D	10/26/10	22.5	22.5	ND(0.0382)	ND(0.0776)	ND(0.0776)	ND(0.0776)	ND(0.0776)	ND(0.776)	ND(0.116)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)
P2RI-19S	12/18/09	9.5	10.5	ND(0.0418)	ND(0.0849)	ND(0.0849)	ND(0.0849)	ND(0.0849)	ND(0.849) UJ	ND(0.127) UJ	ND(0.0418)	ND(0.0418)	ND(0.0418)	ND(0.0418)	ND(0.0418)
P2RI-20	12/18/09	14.5	15.5	ND(0.0388)	ND(0.0787)	ND(0.0787)	ND(0.0787)	ND(0.0787)	ND(0.787) UJ	ND(0.118) UJ	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.0388)
P2RI-21S	12/18/09	30	32	ND(0.0374)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.76) UJ	ND(0.113) UJ	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.0374)
P2RI-21S Dup	10/11/10	14	14	ND(0.0382)	ND(0.0775)	ND(0.0775)	ND(0.0775)	ND(0.0775)	ND(0.775)	ND(0.116)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)
P2RI-21S	10/11/10	14	14	ND(0.0384)	ND(0.0779)	ND(0.0779)	ND(0.0779)	ND(0.0779)	ND(0.779)	ND(0.116)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)
P2RI-22S	12/17/09	15	15	ND(0.0385)	ND(0.0781)	ND(0.0781)	ND(0.0781)	ND(0.0781)	ND(0.781) UJ	ND(0.117) UJ	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0385)
P2RI-23D	10/26/10	22.4	22.8	ND(0.0388)	ND(0.0787)	ND(0.0787)	ND(0.0787)	ND(0.0787)	ND(0.787)	ND(0.118)	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.0388)
P2RI-23S	12/17/09	14	19	ND(0.038)	ND(0.0772)	ND(0.0772)	ND(0.0772)	ND(0.0772)	ND(0.772) UJ	ND(0.115) UJ	ND(0.038)	ND(0.038)	ND(0.038) UJ	ND(0.038)	ND(0.038)
P2RI-24D	11/03/10	47	48	ND(0.0353)	ND(0.0716)	ND(0.0716)	ND(0.0716)	ND(0.0716)	ND(0.716)	ND(0.107)	ND(0.0353)	ND(0.0353)	ND(0.0353)	ND(0.0353)	ND(0.0353)
P2RI-24S	01/19/10	7	9	ND(0.0372)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.755) UJ	ND(0.113)	ND(0.0372)	ND(0.0372)	ND(0.0372) UJ	ND(0.0372)	ND(0.0372)
P2RI-25S	12/19/09	16	18	ND(0.0374)	ND(0.0759)	ND(0.0759)	ND(0.0759)	ND(0.0759)	ND(0.759)	ND(0.113)	ND(0.0374)	ND(0.0374)	ND(0.0374) UJ	ND(0.0374)	ND(0.0374)
P2RI-26D	10/26/10	23.8	24.8	ND(0.0382)	ND(0.0776)	ND(0.0776)	ND(0.0776)	ND(0.0776)	ND(0.776)	ND(0.116)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0382)
P2RI-26S Dup	10/08/10	15.5	16.5	ND(0.038)	ND(0.0772)	ND(0.0772)	ND(0.0772)	ND(0.0772)	ND(0.772)	ND(0.115)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
P2RI-26S	10/08/10	15.5	16.5	ND(0.0366)	ND(0.0744)	ND(0.0744)	ND(0.0744)	ND(0.0744)	ND(0.744)	ND(0.111)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)
P2RI-27D Dup	05/10/11	59	61	ND(0.035)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.7) UJ	ND(0.11)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
P2RI-27D	05/10/11	59	61	ND(0.035)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.7) UJ	ND(0.11)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
P2RI-27DF	05/09/11	85	86	ND(0.036)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.71) UJ	ND(0.11)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
P2RI-27S	11/10/10	14.5	14.5	ND(0.037)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.75)	ND(0.112)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
P2RI-28S	11/03/11	9	10	ND(0.021)	ND(0.085)	ND(0.021)	ND(0.085)	ND(0.085)	ND(0.42)	ND(0.13)	ND(0.0042)	ND(0.0042)	ND(0.042)	ND(0.0042)	ND(0.043)
P2RI-29S	11/03/11	14.5	15.5	ND(0.019)	ND(0.077)	ND(0.019)	ND(0.077)	ND(0.077)	ND(0.38)	ND(0.12) UJ	ND(0.0038)	ND(0.0038)	ND(0.038)	ND(0.0038)	ND(0.038)
P2RI-30S	11/03/11	5	6	ND(0.02)	ND(0.079)	ND(0.02)	ND(0.079)	ND(0.079)	ND(0.39)	ND(0.12) UJ	ND(0.0039)	0.12	ND(0.039)	ND(0.0039)	ND(0.039)
P2RI-31S	11/02/11	9.5	10.5	ND(0.02)	ND(0.079)	ND(0.02)	ND(0.079)	ND(0.079)	ND(0.4)	ND(0.12) UJ	ND(0.004)	0.29	ND(0.04)	ND(0.004)	ND(0.04)
P2RI-32S	11/02/11	7	10	ND(0.2)	ND(0.82)	ND(0.2)	ND(0.82)	ND(0.82)	ND(4.1)	ND(1.2) UJ	ND(0.041)	0.4	ND(0.41)	ND(0.041)	ND(0.41)
P2RI-33D	10/07/10	44	45	ND(0.0369)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.749)	ND(0.112)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)
P2RI-33S	09/27/10	17	18	ND(0.0357)	ND(0.0725)	ND(0.0725)	ND(0.0725)	ND(0.0725)	ND(0.725) UJ	ND(0.108)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0357)
P2RI-34D	09/25/10	42	47	ND(0.0349) R	ND(0.0709)	ND(0.0709)	ND(0.0709)	ND(0.0709)	ND(0.709) UJ	ND(0.106) R	ND(0.0349)	0.0751 J	ND(0.0349) R	ND(0.0349)	ND(0.0349)
P2RI-34S	09/11/10	20	21	ND(0.0359)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.73)	ND(0.109)	ND(0.0359)	0.037 J	ND(0.0359)	ND(0.0359)	ND(0.0359)
P2RI-35D	09/25/10	98	100.5	ND(0.0343) R	ND(0.0697)	ND(0.0697)	ND(0.0697)	ND(0.0697)	ND(0.697) UJ	ND(0.104) R	ND(0.0343)	ND(0.0343)	ND(0.0343) R	ND(0.0343)	ND(0.0343)
P2RI-35S	09/11/10	19	20	ND(0.0368)	ND(0.0748)	ND(0.0748)	ND(0.0748)	ND(0.0748)	ND(0.748)	ND(0.112)	ND(0.0368)	ND(0.0368)	ND(0.0368)	ND(0.0368)	ND(0.0368)
P2RI-36DF	09/14/10	117	118	ND(0.0365)	ND(0.0741)	0.354	ND(0.0741)	ND(0.0741)	ND(0.741)	ND(0.111)	0.0631 J	0.144 J	0.0841 J	ND(0.0365)	ND(0.365)

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1,4-Di-chloro-benzene (mg/kg)	Diethyl-phthalate (mg/kg)	2,4-Dimethyl-phenol (mg/kg)	Dimethyl Phthalate (mg/kg)	Di-n-butyl-phthalate (mg/kg)	2,4-Dinitro-phenol (mg/kg)	1,4-Dioxane (mg/kg)	Fluor-anthene (mg/kg)	Fluorene (mg/kg)	Indene (mg/kg)	Indeno-(1,2,3-cd) pyrene (mg/kg)	Tetraethyl Lead (mg/kg)
P2RI-36S Dup	09/15/10	21	23	ND(0.0361)	ND(0.0732)	ND(0.0732)	ND(0.0732)	ND(0.0732)	ND(0.732)	ND(0.109)	ND(0.0361)	0.0393 J	ND(0.0361)	ND(0.0361)	ND(0.0361)
P2RI-36S	09/15/10	21	23	ND(0.0371)	ND(0.0753)	ND(0.0753)	ND(0.0753)	ND(0.0753)	ND(0.753)	ND(0.112)	ND(0.0371)	ND(0.0371)	ND(0.0371)	ND(0.0371)	ND(0.0371)
P2RI-37D	05/08/11	44	45	ND(0.039)	ND(0.077)	ND(0.077)	ND(0.077)	ND(0.077)	ND(0.77) UJ	ND(0.12)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.038)
P2RI-37S Dup	09/27/10	18	19	ND(0.0372)	ND(0.0756)	ND(0.0756)	ND(0.0756)	ND(0.0756)	ND(0.756) UJ	ND(0.113)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)
P2RI-37S	09/27/10	18	19	ND(0.038)	ND(0.0771)	ND(0.0771)	ND(0.0771)	ND(0.0771)	ND(0.771) UJ	ND(0.115)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
P2RI-38S	09/11/10	13	14	ND(0.0369)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.749)	ND(0.112)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)
P2RI-39S	09/10/10	12	13	ND(0.0384)	ND(0.0779)	ND(0.0779)	ND(0.0779)	ND(0.0779)	ND(0.779)	ND(0.116)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0384)
P2RI-41D	09/23/10	64	64	ND(0.0393)	ND(0.0799)	ND(0.0799)	ND(0.0799)	ND(0.0799)	ND(0.799) UJ	ND(0.119)	ND(0.0393)	0.0918 J	ND(0.0393)	ND(0.0393)	ND(0.0393)
P2RI-41S	09/10/10	14	15	ND(0.0373)	ND(0.0757)	ND(0.0757)	ND(0.0757)	ND(0.0757)	ND(0.757)	ND(0.113)	ND(0.0373)	ND(0.0373)	ND(0.0373)	ND(0.0373)	ND(0.0373)
P2RI-43S	09/10/10	23	25	ND(0.0369)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.749)	ND(0.112)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)
P2RI-44D	11/18/10	85	87	ND(0.0349)	ND(0.0708)	ND(0.0708)	ND(0.0708)	ND(0.0708)	ND(0.708)	ND(0.106)	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0349) R	ND(0.0349)
P2RI-44S	09/11/10	20	21	ND(0.0359)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.73)	ND(0.109)	ND(0.0359)	ND(0.0359)	ND(0.0359)	ND(0.0359)	ND(0.0359)
P2RI-44SR	05/06/11	27	29	ND(0.036)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.72) UJ	ND(0.11)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
P2RI-45D	05/05/11	33	35	ND(0.035) UJ	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.71) UJ	ND(0.11)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
P2RI-45E	05/05/11	13	14	ND(0.037)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.75) UJ	ND(0.11)	0.044 J	0.21	ND(0.037)	ND(0.037)	ND(0.037)
P2RI-45S	09/11/10	6	7	ND(0.0372)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.755)	ND(0.113)	ND(0.0372)	0.214	ND(0.0372)	ND(0.0372)	ND(0.0372)
P2RI-45S	09/11/10	14	15	ND(0.0366)	ND(0.0744)	ND(0.0744)	ND(0.0744)	ND(0.0744)	ND(0.744)	ND(0.111)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0366)
P2RI-46D	09/12/10	65	66	ND(0.0369)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.0749)	ND(0.749)	ND(0.112)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0369)
P2RI-46DFL	09/14/10	90	91	ND(0.0351)	ND(0.0712)	ND(0.0712)	ND(0.0712)	ND(0.0712)	ND(0.712)	ND(0.106)	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.106)
P2RI-46S	09/10/10	18	19	ND(0.0372)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.755)	ND(0.113)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)
P2RI-47DF	09/28/10	88	90.5	ND(0.035) R	ND(0.0711)	0.0913 J	ND(0.0711)	ND(0.0711)	ND(0.711)	ND(0.106) R	ND(0.035)	0.0467 J	ND(0.035) R	ND(0.035)	ND(0.035)
P2RI-47S	09/27/10	23	25	ND(0.0367)	ND(0.0745)	ND(0.0745)	ND(0.0745)	ND(0.0745)	ND(0.745) UJ	ND(0.111)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0367)
P2RI-48S	09/29/10	8	9	ND(0.0391)	ND(0.0794)	ND(0.0794)	ND(0.0794)	ND(0.0794)	ND(0.794)	ND(0.118)	ND(0.0391)	ND(0.0391)	ND(0.0391)	ND(0.0391)	ND(0.0391)
P2RI-49S	09/30/10	12	14	ND(0.0404)	ND(0.082)	ND(0.082)	ND(0.082)	ND(0.082)	ND(0.82)	ND(0.122)	ND(0.0404)	ND(0.0404)	ND(0.0404)	ND(0.0404)	ND(0.0404)
P2RI-50S	11/10/10	8	24	ND(0.0361)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.0734)	ND(0.734)	ND(0.11)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0361)
P2RI-52DF	05/21/11	148.5	150	ND(0.035)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.71) R	ND(0.11)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
P2RI-52S	05/23/11	17	18	ND(0.036)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.72) UJ	ND(0.11)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
P2RI-53S	05/24/11	12	14	ND(0.041)	ND(0.082)	ND(0.082)	ND(0.082)	ND(0.082)	ND(0.82) UJ	ND(0.12)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
P2RI-54SL	05/21/11	95	97	ND(0.038)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.76) UJ	ND(0.11)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
P2RI-54SU	05/24/11	0	13	ND(0.041)	ND(0.082)	ND(0.082)	ND(0.082)	ND(0.082)	ND(0.82) UJ	ND(0.12)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
P2RI-55DF	10/27/11	128	133	ND(0.017)	ND(0.069)	ND(0.017)	ND(0.069)	ND(0.069)	ND(0.35)	ND(0.1)	ND(0.0035)	0.0088 J	ND(0.035)	ND(0.0035)	ND(0.035)
P2RI-55S	10/29/11	27	29	ND(0.018)	ND(0.071)	ND(0.018)	ND(0.071)	ND(0.071)	ND(0.35) UJ	ND(0.11)	0.018	0.014 J	ND(0.035)	0.012 J	ND(0.036)
P2RI-56DF	10/26/11	72	74	ND(0.019)	ND(0.076)	0.029 J	ND(0.076)	ND(0.076)	ND(0.38) UJ	ND(0.11) UJ	0.0039 J	0.012 J	ND(0.038)	0.0044 J	ND(0.038)
P2RI-56S	10/31/11	18	22	ND(0.019)	ND(0.075)	ND(0.019)	ND(0.075)	ND(0.075)	ND(0.38) UJ	ND(0.11)	0.01 J	ND(0.0037)	ND(0.038)	0.0069 J	ND(0.038)
P2RI-57S	11/02/11	5	6	ND(0.019)	ND(0.075)	ND(0.019)	ND(0.075)	ND(0.075)	ND(0.37)	ND(0.11) UJ	0.0038 J	ND(0.0037)	ND(0.037)	ND(0.0037)	ND(0.037)
P2RI-58S	11/01/11	13	14	ND(0.019) UJ	ND(0.076) UJ	ND(0.019) UJ	ND(0.076) UJ	ND(0.076) UJ	ND(0.38) UJ	ND(0.11)	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.038)	ND(0.0038)	ND(0.038)
P2RI-59S	11/01/11	11	12	ND(0.019) UJ	ND(0.077) UJ	ND(0.019) UJ	ND(0.077) UJ	ND(0.077) UJ	ND(0.38) UJ	ND(0.12)	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.038)	ND(0.0038)	ND(0.039)
P2RI-60S	10/28/11	13	15	ND(0.021)	ND(0.084)	ND(0.021)	ND(0.084)	ND(0.084)	ND(0.42) UJ	ND(0.13)	ND(0.0042)	ND(0.0042)	ND(0.042)	ND(0.0042)	ND(0.043)
P2RI-61S	11/02/11	9	10	ND(0.021)	ND(0.083)	ND(0.021)	ND(0.083)	ND(0.083)	ND(0.41)	ND(0.12) UJ	ND(0.0041)	ND(0.0041)	ND(0.041)	ND(0.0041)	ND(0.041)
P2RI-62S	11/02/11	4	8	ND(0.023)	ND(0.092)	ND(0.023)	ND(0.092)	ND(0.092) UJ	ND(0.46)	ND(0.14) UJ	ND(0.0046) UJ	ND(0.0046)	ND(0.046)	ND(0.0046) UJ	ND(0.046)
P2RI-63S	11/03/11	13.5	14.5	ND(0.02)	ND(0.079)	ND(0.02)	ND(0.079)	ND(0.079)	ND(0.39)	ND(0.12)	ND(0.0039)	ND(0.0039)	ND(0.039)	ND(0.0039)	ND(0.08)
PA-5R	11/02/11	9	10	ND(0.02)	ND(0.081)	ND(0.02)	ND(0.081)	ND(0.081)	ND(0.41)	ND(0.12) UJ	ND(0.0041)	ND(0.0041)	ND(0.041)	ND(0.0041)	ND(0.041)
Direct Exposure, Subsurface, 5/2013				2.4	4,900	120	NA	610	12	4.9	2,000	2,000	NA	50	0.00061
Migration to Groundwater, Subsurface, 5/2013				0.72	72.64	4.5	NA	50.75	0.782	0.0014	500	600	NA	100	0.000035

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	2-Methyl phenol (mg/kg)	4-Methyl phenol (mg/kg)	Naphthalene (mg/kg)	4-Nitro-phenol (mg/kg)	Phen-anthrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	Pyridine (mg/kg)	Quinoline (mg/kg)	Thiophenol (Benzene thiol) (mg/kg)
GW-4R	10/31/11	10	11	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.019)	ND(0.019) UJ	ND(0.0038) UJ	ND(0.19)	ND(0.0038) UJ	ND(0.019)	ND(0.0038) UJ	ND(0.077)	ND(0.038) UJ	ND(0.38)
GW-16R	10/11/10	8.5	9.5	0.42	0.84	ND(0.076)	ND(0.076)	1.01	ND(0.193)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.076)	ND(0.0375)	ND(0.375)
GW-17R	10/31/11	9	10	ND(0.0038)	ND(0.0038)	ND(0.019)	ND(0.019)	ND(0.0038)	ND(0.19)	ND(0.0038)	ND(0.019)	ND(0.0038)	ND(0.077)	ND(0.038)	ND(0.38)
GW-20D	10/20/10	16.5	18.5	ND(0.0375)	ND(0.0375)	ND(0.0761)	ND(0.0761)	ND(0.0375)	ND(0.193)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0761)	ND(0.0375)	ND(0.375)
GW-20RS Dup	10/20/10	8	11.5	ND(0.0375)	ND(0.0375)	ND(0.0761)	ND(0.0761)	ND(0.0375)	ND(0.193)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0761)	ND(0.0375)	ND(0.375)
GW-20RS	10/20/10	8	11.5	ND(0.0378)	ND(0.0378)	ND(0.0767)	ND(0.0767)	ND(0.0378)	ND(0.195)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0767)	ND(0.0378)	ND(0.378)
GW-A	11/06/10	60	60	0.201 J	0.317 J	ND(0.0708)	ND(0.0708)	0.296 J	ND(0.18)	ND(0.0349)	0.0846 J	ND(0.0349)	ND(0.0708)	ND(0.0349)	ND(0.349)
GW-C-25	11/07/10	39	39	0.0735 J	0.0905 J	ND(0.0714)	ND(0.0714)	0.0745 JB	ND(0.181)	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.0714)	ND(0.0351)	ND(0.351)
GW-C-46S	09/29/10	24	25	0.0944 J	0.139 J	ND(0.0719)	ND(0.0719)	0.0848 J	ND(0.182)	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.0719)	ND(0.0354)	ND(0.354)
GW-C-47S Dup	09/28/10	16	17	0.153 J	0.317 J	ND(0.0733)	ND(0.0733)	0.569	ND(0.186)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0733)	ND(0.0361)	ND(0.361)
GW-C-47S	09/28/10	16	17	0.394 J	0.865 J	ND(0.0734)	ND(0.0734)	0.865	ND(0.186)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0361)	ND(0.361)
GW-C-48	11/06/10	27	27	0.202 J	0.371 J	ND(0.0754)	ND(0.0754)	0.551 J	ND(0.191)	0.0461 J	0.0945 J	ND(0.0371)	ND(0.0754)	ND(0.0371)	ND(0.371)
GW-CD	11/04/10	65	66	0.0832 J	0.114 J	ND(0.0697)	ND(0.0697)	0.0853 J	ND(0.177)	ND(0.0343)	ND(0.0343)	ND(0.0343)	ND(0.0697)	ND(0.0343)	ND(0.343) UJ
GW-CDF Dup	11/07/10	109	110	0.0415 J	0.0497 J	ND(0.0694)	ND(0.0694)	0.0539 JB	ND(0.176)	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.0694)	ND(0.0342)	ND(0.342)
GW-CDF	11/07/10	109	110	0.228 J	0.456 J	ND(0.0694)	ND(0.0694)	0.663 J	ND(0.176)	ND(0.0342)	ND(0.0342)	ND(0.0342)	ND(0.0694)	ND(0.0342)	ND(0.342)
GW-CS	11/04/10	17	18	0.0927 J	0.131 J	ND(0.0731)	ND(0.0731)	0.109 J	ND(0.185)	0.036 J	ND(0.036)	ND(0.036)	ND(0.0731)	ND(0.036)	ND(0.36) UJ
GW-D Dup	11/05/10	49	51	0.0412 J	0.0528 J	ND(0.0707)	ND(0.0707)	0.0539 JB	ND(0.18)	ND(0.0348)	ND(0.0348)	ND(0.0348)	ND(0.0707)	ND(0.0348)	ND(0.348)
GW-D	11/05/10	49	51	0.0442 J	0.0568 J	ND(0.0705)	ND(0.0705)	0.0568 JB	ND(0.179)	ND(0.0347)	ND(0.0347)	ND(0.0347)	ND(0.0705)	ND(0.0347)	ND(0.347)
GW-ED Dup	11/08/10	64	64	0.0793 J	0.0902 J	ND(0.0728)	ND(0.0728)	0.063 JB	ND(0.185)	ND(0.0359)	ND(0.0359)	ND(0.0359)	ND(0.0728)	ND(0.0359)	ND(0.359)
GW-ED	11/08/10	64	64	0.217 J	0.239 J	ND(0.0727)	ND(0.0727)	0.185 J	ND(0.185)	0.0554 J	ND(0.0358)	ND(0.0358)	ND(0.0727)	ND(0.0358)	ND(0.358)
GW-ES Dup	10/14/10	12	16	0.318	0.582	ND(0.0735)	ND(0.0735)	0.735	ND(0.187)	0.0373 J	ND(0.0362)	ND(0.0362)	ND(0.0735)	ND(0.0362)	ND(0.362)
GW-ES	10/14/10	12	16	0.362	0.636	ND(0.0735)	ND(0.0735)	0.855	ND(0.186)	ND(0.0362)	ND(0.0362)	ND(0.0362)	ND(0.0735)	ND(0.0362)	ND(0.362)
GW-FS	09/28/10	15	16	ND(0.0374)	ND(0.0374)	ND(0.076)	ND(0.076)	ND(0.0374)	ND(0.193)	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.076)	ND(0.0374)	ND(0.374)
GW-GS	09/27/10	15	16	ND(0.0377)	ND(0.0377)	ND(0.0765)	ND(0.0765)	ND(0.0377)	ND(0.194)	ND(0.0377)	ND(0.0377)	ND(0.0377)	ND(0.0765)	ND(0.0377)	ND(0.377)
GW-GS	09/29/10	8	9	ND(0.0393)	ND(0.0393)	ND(0.0799)	ND(0.0799)	ND(0.0393)	ND(0.203)	ND(0.0393)	ND(0.0393)	ND(0.0393)	ND(0.0799)	ND(0.0393)	ND(0.393)
GW-K	09/10/10	39	40	0.127 J	0.169 J	ND(0.0708)	ND(0.0708)	0.1 J	ND(0.18)	0.0518 J	ND(0.0349)	0.0359 J	ND(0.0708)	ND(0.0349)	ND(0.349)
GW-L	05/07/11	29	31	0.14 J	0.19	ND(0.073)	ND(0.073)	0.14 J	ND(0.18)	0.07 J	ND(0.036)	0.053 J	ND(0.073)	ND(0.036)	ND(0.36)
GW-MS	09/28/10	14	15	ND(0.0363)	ND(0.0363)	ND(0.0738)	ND(0.0738)	ND(0.0363)	ND(0.187)	ND(0.0363)	ND(0.0363)	ND(0.0363)	ND(0.0738)	ND(0.0363)	ND(0.363)
GW-NS Dup	12/04/10	9	10	ND(0.0381)	ND(0.0381)	ND(0.0774)	ND(0.0774)	ND(0.0381)	ND(0.196)	ND(0.0381)	ND(0.0381)	ND(0.0381)	ND(0.0774)	ND(0.0381)	ND(0.381) UJ
GW-NS	12/04/10	9	10	ND(0.0385)	ND(0.0385)	ND(0.0781)	ND(0.0781)	ND(0.0385)	ND(0.198)	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0781)	ND(0.0385)	ND(0.385) UJ
P2RI-1D	01/10/10	20	21	0.211	0.266	ND(0.0744)	ND(0.0744)	0.277	ND(0.189)	0.0488 J	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0366)	ND(0.366)
P2RI-1D	01/10/10	51	52	0.282	0.358	ND(0.0727)	ND(0.0727)	0.239	ND(0.185)	0.0662 J	ND(0.0358)	0.0402 J	ND(0.0727)	ND(0.0358)	ND(0.358)
P2RI-3D	01/09/10	79	81	0.179	0.253	ND(0.0706)	ND(0.0706)	0.221	ND(0.179)	0.04 J	ND(0.0348)	ND(0.0348)	ND(0.0706)	ND(0.0348)	ND(0.348)
P2RI-3S	12/20/09	16	18	ND(0.0367)	ND(0.0367)	ND(0.0745)	ND(0.0745)	ND(0.0367)	ND(0.189)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0745) UJ	ND(0.0367)	ND(0.367) UJ
P2RI-4S	12/16/09	21	25	ND(0.0375)	ND(0.0375)	ND(0.076)	ND(0.076)	0.0431 J	ND(0.193)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.076) UJ	ND(0.0375)	ND(0.375) UJ
P2RI-4D	01/11/10	34	36	ND(0.0354)	ND(0.0354)	ND(0.072)	ND(0.072)	ND(0.0354)	ND(0.183)	ND(0.0354)	ND(0.0354)	ND(0.0354)	ND(0.072)	ND(0.0354)	ND(0.354)
P2RI-5S	05/06/11	11	12	ND(0.038)	ND(0.038)	ND(0.076)	ND(0.076)	0.065 J	ND(0.19)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.076) UJ	ND(0.038)	ND(0.38)
P2RI-6	12/16/09	24	27	0.193 J	0.41	ND(0.0808)	ND(0.0808)	0.929	ND(0.205)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0808) UJ	ND(0.0398)	ND(0.398) UJ
P2RI-8	12/17/09	33	33	0.0733 J	0.128 J	ND(0.0712)	ND(0.0712)	0.17 J	ND(0.181)	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.0712)	ND(0.0351)	ND(0.351) UJ
P2RI-9D	01/24/10	50	53	0.203	0.288	ND(0.0715)	ND(0.0715)	0.224	ND(0.181)	0.0427 J	ND(0.0352)	ND(0.0352) UJ	ND(0.0715)	ND(0.0352)	ND(0.352)
P2RI-9S Dup	12/20/09	15	16	ND(0.0386)	ND(0.0386)	ND(0.0784)	ND(0.0784)	ND(0.0386)	ND(0.199)	ND(0.0386)	ND(0.0386)	ND(0.0386)	ND(0.0784) UJ	ND(0.0386)	ND(0.386) UJ
P2RI-9S	12/20/09	15	16	ND(0.0391)	ND(0.0391)	ND(0.0793)	ND(0.0793)	ND(0.0391)	ND(0.201)	ND(0.0391)	ND(0.0391)	ND(0.0391)	ND(0.0793) UJ	ND(0.0391)	ND(0.391) UJ
P2RI-9S	12/20/09	24	26	ND(0.0426)	ND(0.0426)	ND(0.0865)	ND(0.0865)	ND(0.0426)	ND(0.219)	ND(0.0426)	ND(0.0426)	ND(0.0426)	ND(0.0865) UJ	ND(0.0426)	ND(0.426) UJ
P2RI-10D	01/20/10	67	72	0.0469 J	0.0563 J	ND(0.0699)	ND(0.0699)	0.0574 J	ND(0.177)	ND(0.0344)	ND(0.0344)	ND(0.0344)	ND(0.0699) UJ	ND(0.0344)	ND(0.344)
P2RI-10S	01/11/10	14	16	ND(0.037)	ND(0.037)	ND(0.0751)	ND(0.0751)	ND(0.037)	ND(0.191)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.0751)	ND(0.037)	ND(0.37)

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	2-Methyl phenol (mg/kg)	4-Methyl phenol (mg/kg)	Naphthalene (mg/kg)	4-Nitro-phenol (mg/kg)	Phen-anthrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	Pyridine (mg/kg)	Quinoline (mg/kg)	Thiophenol (Benzene thiol) (mg/kg)
P2RI-11D	01/10/10	59	60	0.0428 J	0.0596 J	ND(0.07)	ND(0.07)	0.0481 J	ND(0.178)	ND(0.0345)	ND(0.0345)	ND(0.0345)	ND(0.07)	ND(0.0345)	ND(0.345)
P2RI-11S	01/09/10	9	9	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.075)	ND(0.037)	ND(0.19)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.37)
P2RI-11S	01/09/10	19	19	ND(0.0365)	0.0409 J	ND(0.074)	ND(0.074)	ND(0.0365)	ND(0.188)	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.074)	ND(0.0365)	ND(0.365)
P2RI-12	01/19/10	7	12	ND(0.038)	ND(0.038)	ND(0.0771)	ND(0.0771)	ND(0.038)	ND(0.196)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0771) UJ	ND(0.038)	ND(0.38)
P2RI-13 Dup	01/12/10	22	24	0.281 J	0.595 J	ND(0.0725)	ND(0.0725)	1.3 J	ND(0.184)	0.0465 J	ND(0.0357)	ND(0.0357)	ND(0.0725) UJ	ND(0.0357)	ND(0.357) UJ
P2RI-13	01/12/10	22	24	0.142 J	0.241 J	ND(0.0734)	ND(0.0734)	0.405 J	ND(0.186)	0.0438 J	ND(0.0361)	ND(0.0361)	ND(0.0734) UJ	ND(0.0361)	ND(0.361) UJ
P2RI-14	12/19/09	13	16	ND(0.0365)	0.041 J	ND(0.0742)	ND(0.0742)	0.0808 J	ND(0.188)	ND(0.0365)	ND(0.0365)	ND(0.0365)	ND(0.0742)	ND(0.0365)	ND(0.365)
P2RI-15	01/19/10	5	10	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0734)	ND(0.0361)	ND(0.186)	ND(0.0361)	ND(0.0361)	ND(0.0361)	ND(0.0734) UJ	ND(0.0361)	ND(0.361)
P2RI-16D	10/27/10	18	19	ND(0.0368)	ND(0.0368)	ND(0.0747)	ND(0.0747)	ND(0.0368)	ND(0.19)	ND(0.0368)	ND(0.0368)	ND(0.0368)	ND(0.0747)	ND(0.0368)	ND(0.368)
P2RI-16S	12/19/09	13	16	ND(0.0371)	ND(0.0371)	ND(0.0754)	ND(0.0754)	ND(0.0371)	ND(0.191)	ND(0.0371)	ND(0.0371)	ND(0.0371)	ND(0.0754) UJ	ND(0.0371)	ND(0.371) UJ
P2RI-17	12/19/09	12	13	ND(0.0379)	ND(0.0379)	ND(0.0769)	ND(0.0769)	ND(0.0379)	ND(0.195)	ND(0.0379)	ND(0.0379)	ND(0.0379)	ND(0.0769) UJ	ND(0.0379)	ND(0.379) UJ
P2RI-18	12/21/09	11	12	ND(0.0385)	ND(0.0385)	ND(0.0782)	ND(0.0782)	ND(0.0385)	ND(0.198)	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0782) UJ	ND(0.0385)	ND(0.385) UJ
P2RI-18D	10/11/10	15.5	16.5	ND(0.0389)	ND(0.0389)	ND(0.079)	ND(0.079)	ND(0.0389)	ND(0.2)	ND(0.0389)	ND(0.0389)	ND(0.0389)	ND(0.079)	ND(0.0389)	ND(0.389)
P2RI-18SR	10/11/10	9	10	ND(0.0378)	ND(0.0378)	ND(0.0767)	ND(0.0767)	ND(0.0378)	ND(0.195)	ND(0.0378)	ND(0.0378)	ND(0.0378)	ND(0.0767)	ND(0.0378)	ND(0.378)
P2RI-19D	10/26/10	22.5	22.5	ND(0.0382)	ND(0.0382)	ND(0.0776)	ND(0.0776)	ND(0.0382)	ND(0.197)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0776)	ND(0.0382)	ND(0.382)
P2RI-19S	12/18/09	9.5	10.5	ND(0.0418)	ND(0.0418)	ND(0.0849)	ND(0.0849)	ND(0.0418)	ND(0.215)	ND(0.0418)	ND(0.0418)	ND(0.0418)	ND(0.0849)	ND(0.0418)	ND(0.418)
P2RI-20	12/18/09	14.5	15.5	ND(0.0388)	ND(0.0388)	ND(0.0787)	ND(0.0787)	ND(0.0388)	ND(0.2)	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.0787)	ND(0.0388)	ND(0.388)
P2RI-21S	12/18/09	30	32	0.159 J	0.227	ND(0.076)	ND(0.076)	0.125 J	ND(0.193)	0.051 J	ND(0.0374)	ND(0.0374)	ND(0.076)	ND(0.0374)	ND(0.374)
P2RI-21S Dup	10/11/10	14	14	ND(0.0382)	ND(0.0382)	ND(0.0775)	ND(0.0775)	ND(0.0382)	ND(0.197)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0775)	ND(0.0382)	ND(0.382)
P2RI-21S	10/11/10	14	14	ND(0.0384)	ND(0.0384)	ND(0.0779)	ND(0.0779)	ND(0.0384)	ND(0.198)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0779)	ND(0.0384)	ND(0.384)
P2RI-22S	12/17/09	15	15	ND(0.0385)	ND(0.0385)	ND(0.0781)	ND(0.0781)	ND(0.0385)	ND(0.198)	ND(0.0385)	ND(0.0385)	ND(0.0385)	ND(0.0781)	ND(0.0385)	ND(0.385)
P2RI-23D	10/26/10	22.4	22.8	ND(0.0388)	ND(0.0388)	ND(0.0787)	ND(0.0787)	ND(0.0388)	ND(0.2)	ND(0.0388)	ND(0.0388)	ND(0.0388)	ND(0.0787)	ND(0.0388)	ND(0.388)
P2RI-23S	12/17/09	14	19	ND(0.038)	ND(0.038)	ND(0.0772)	ND(0.0772)	ND(0.038)	ND(0.196)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0772)	ND(0.038)	ND(0.38) UJ
P2RI-24D	11/03/10	47	48	0.0769 J	0.0951 J	ND(0.0716)	ND(0.0716)	0.0481 J	ND(0.182)	ND(0.0353)	ND(0.0353)	ND(0.0353)	ND(0.0716)	ND(0.0353)	ND(0.353) UJ
P2RI-24S	01/19/10	7	9	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0755)	ND(0.0372)	ND(0.192)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0755) UJ	ND(0.0372)	ND(0.372)
P2RI-25S	12/19/09	16	18	ND(0.0374)	ND(0.0374)	ND(0.0759)	ND(0.0759)	ND(0.0374)	ND(0.193)	ND(0.0374)	ND(0.0374)	ND(0.0374)	ND(0.0759) UJ	ND(0.0374)	ND(0.374) UJ
P2RI-26D	10/26/10	23.8	24.8	ND(0.0382)	ND(0.0382)	ND(0.0776)	ND(0.0776)	ND(0.0382)	ND(0.197)	ND(0.0382)	ND(0.0382)	ND(0.0382)	ND(0.0776)	ND(0.0382)	ND(0.382)
P2RI-26S Dup	10/08/10	15.5	16.5	ND(0.038)	ND(0.038)	ND(0.0772)	ND(0.0772)	ND(0.038)	ND(0.196)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0772)	ND(0.038)	ND(0.38)
P2RI-26S	10/08/10	15.5	16.5	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0744)	ND(0.0366)	ND(0.189)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0366)	ND(0.366)
P2RI-27D Dup	05/10/11	59	61	0.12 J	0.15 J	ND(0.07)	ND(0.07)	0.12 J	ND(0.18)	0.04 J	ND(0.035)	ND(0.035)	ND(0.07)	ND(0.035)	ND(0.35)
P2RI-27D	05/10/11	59	61	0.12 J	0.16 J	ND(0.07)	ND(0.07)	0.13	ND(0.18)	0.044 J	ND(0.035)	ND(0.035)	ND(0.07)	ND(0.035)	ND(0.35)
P2RI-27DF	05/09/11	85	86	0.26	0.48	ND(0.071)	ND(0.071)	0.53	ND(0.18)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.071)	ND(0.036)	ND(0.36)
P2RI-27S	11/10/10	14.5	14.5	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.075)	ND(0.037)	ND(0.19)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.37) UJ
P2RI-28S	11/03/11	9	10	ND(0.0042)	ND(0.0042)	ND(0.021)	ND(0.021)	ND(0.0042)	ND(0.21)	ND(0.0042)	ND(0.021)	ND(0.0042)	ND(0.085)	ND(0.042)	ND(0.42) UJ
P2RI-29S	11/03/11	14.5	15.5	ND(0.0038)	ND(0.0038)	ND(0.019)	ND(0.019)	ND(0.0038)	ND(0.19)	ND(0.0038)	ND(0.019)	ND(0.0038)	ND(0.077)	ND(0.038)	ND(0.38)
P2RI-30S	11/03/11	5	6	ND(0.0039)	ND(0.0039)	ND(0.02)	ND(0.02)	ND(0.0039)	ND(0.2)	ND(0.0039)	ND(0.02)	ND(0.0039)	ND(0.079)	ND(0.039)	ND(0.39)
P2RI-31S	11/02/11	9.5	10.5	0.36	ND(0.004)	ND(0.02)	ND(0.02)	ND(0.004)	ND(0.2)	0.59	ND(0.02)	ND(0.004)	ND(0.079)	ND(0.04)	ND(0.4)
P2RI-32S	11/02/11	7	10	ND(0.041)	ND(0.041)	ND(0.2)	ND(0.2)	ND(0.041)	ND(2)	1.1	ND(0.2)	0.29	ND(0.82)	ND(0.41)	ND(4.1)
P2RI-33D	10/07/10	44	45	0.201	0.246	ND(0.0749)	ND(0.0749)	0.201	ND(0.19)	0.0459 J	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.369)
P2RI-33S	09/27/10	17	18	ND(0.0357)	ND(0.0357)	ND(0.0725)	ND(0.0725)	ND(0.0357)	ND(0.184)	ND(0.0357)	ND(0.0357)	ND(0.0357)	ND(0.0725)	ND(0.0357)	ND(0.357)
P2RI-34D	09/25/10	42	47	0.455	0.646	ND(0.0709) R	ND(0.0709) R	0.434	ND(0.18)	0.0974 J	0.106 J	0.0519 J	ND(0.0709) R	ND(0.0349)	ND(0.349) R
P2RI-34S	09/11/10	20	21	0.251	0.327	ND(0.073)	ND(0.073)	0.229	ND(0.185)	0.061 J	ND(0.0359)	ND(0.0359)	ND(0.073)	ND(0.0359)	ND(0.359)
P2RI-35D	09/25/10	98	100.5	0.156 J	0.219	ND(0.0697) R	ND(0.0697) R	0.177	ND(0.177)	0.0354 J	ND(0.0343) R	ND(0.0343)	ND(0.0697) R	ND(0.0343)	ND(0.343) R
P2RI-35S	09/11/10	19	20	0.0882 J	0.112 J	ND(0.0748)	ND(0.0748)	0.0592 J	ND(0.19)	0.0424 J	ND(0.0368)	ND(0.0368)	ND(0.0748)	ND(0.0368)	ND(0.368)
P2RI-36DF	09/14/10	117	118	0.752	1.04	0.21	0.476	0.719	ND(0.188)	0.232	0.653	0.111 J	ND(0.0741)	ND(0.0365)	ND(0.365)

TABLE 4.7-4. ANALYTICAL RESULTS, SVOCs, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	2-Methyl phenol (mg/kg)	4-Methyl phenol (mg/kg)	Naphthalene (mg/kg)	4-Nitro-phenol (mg/kg)	Phen-anthrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	Pyridine (mg/kg)	Quinoline (mg/kg)	Thiophenol (Benzene thiol) (mg/kg)
P2RI-36S Dup	09/15/10	21	23	0.153 J	0.23	ND(0.0732)	ND(0.0732)	0.142 J	ND(0.186)	0.0612 J	ND(0.0361)	0.047 J	ND(0.0732)	ND(0.0361)	ND(0.361)
P2RI-36S	09/15/10	21	23	0.111 J	0.157 J	ND(0.0753)	ND(0.0753)	0.0764 J	ND(0.191)	0.0596 J	ND(0.0371)	0.0506 J	ND(0.0753)	ND(0.0371)	ND(0.371)
P2RI-37D	05/08/11	44	45	0.25	0.31	ND(0.077)	ND(0.077)	0.26	ND(0.19)	0.057 J	ND(0.039)	0.04 J	ND(0.077)	ND(0.039)	ND(0.39)
P2RI-37S Dup	09/27/10	18	19	ND(0.0372)	ND(0.0372)	ND(0.0756)	ND(0.0756)	ND(0.0372)	ND(0.192)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0756)	ND(0.0372)	ND(0.372)
P2RI-37S	09/27/10	18	19	ND(0.038)	ND(0.038)	ND(0.0771)	ND(0.0771)	ND(0.038)	ND(0.196)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.0771)	ND(0.038)	ND(0.38)
P2RI-38S	09/11/10	13	14	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0749)	ND(0.0369)	ND(0.19)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.369)
P2RI-39S	09/10/10	12	13	ND(0.0384)	ND(0.0384)	ND(0.0779)	ND(0.0779)	ND(0.0384)	ND(0.198)	ND(0.0384)	ND(0.0384)	ND(0.0384)	ND(0.0779)	ND(0.0384)	ND(0.384)
P2RI-41D	09/23/10	64	64	0.179 J	0.262	ND(0.0799)	ND(0.0799)	0.0989 J	ND(0.203)	0.113 J	0.0596 J	0.0679 J	ND(0.0799)	ND(0.0393)	ND(0.393)
P2RI-41S	09/10/10	14	15	ND(0.0373)	ND(0.0373)	ND(0.0757)	ND(0.0757)	ND(0.0373)	ND(0.192)	ND(0.0373)	ND(0.0373)	ND(0.0373)	ND(0.0757)	ND(0.0373)	ND(0.373)
P2RI-43S	09/10/10	23	25	0.291	0.593	ND(0.0749)	ND(0.0749)	0.671	ND(0.19)	ND(0.0369)	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.369)
P2RI-44D	11/18/10	85	87	0.19	0.222	ND(0.0708)	ND(0.0708)	0.211	ND(0.18)	ND(0.0349)	ND(0.0349)	ND(0.0349)	ND(0.0708)	ND(0.0349)	ND(0.349)
P2RI-44S	09/11/10	20	21	ND(0.0359)	ND(0.0359)	ND(0.073)	ND(0.073)	ND(0.0359)	ND(0.185)	ND(0.0359)	ND(0.0359)	ND(0.0359)	ND(0.073)	ND(0.0359)	ND(0.359)
P2RI-44SR	05/06/11	27	29	ND(0.036)	ND(0.036)	ND(0.072)	ND(0.072)	ND(0.036)	ND(0.18)	0.037 J	ND(0.036)	ND(0.036)	ND(0.072)	ND(0.036)	ND(0.36)
P2RI-45D	05/05/11	33	35	0.081 J	0.11 J	ND(0.071)	ND(0.071)	0.086 J	ND(0.18)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.071)	ND(0.035)	ND(0.35) UJ
P2RI-45E	05/05/11	13	14	0.29	0.74	ND(0.075)	ND(0.075)	ND(0.037)	ND(0.19)	0.44	ND(0.037)	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.37) UJ
P2RI-45S	09/11/10	6	7	ND(0.0372)	0.0664 J	ND(0.0755)	ND(0.0755)	ND(0.0372)	ND(0.191)	0.27	ND(0.0372)	0.0619 J	ND(0.0755)	ND(0.0372)	ND(0.372)
P2RI-45S	09/11/10	14	15	0.488	1.03	ND(0.0744)	ND(0.0744)	1.66	ND(0.189)	ND(0.0366)	ND(0.0366)	ND(0.0366)	ND(0.0744)	ND(0.0366)	ND(0.366)
P2RI-46D	09/12/10	65	66	0.134 J	0.19	ND(0.0749)	ND(0.0749)	0.134 J	ND(0.19)	0.0436 J	ND(0.0369)	ND(0.0369)	ND(0.0749)	ND(0.0369)	ND(0.369)
P2RI-46DFL	09/14/10	90	91	0.051 J	0.0701 J	ND(0.0712)	ND(0.0712)	0.0616 J	ND(0.181)	ND(0.0351)	ND(0.0351)	ND(0.0351)	ND(0.0712)	ND(0.0351)	ND(0.351)
P2RI-46S	09/10/10	18	19	1.24	2.59	ND(0.0755)	ND(0.0755)	3.04	ND(0.191)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0372)	ND(0.372)
P2RI-47DF	09/28/10	88	90.5	0.276	0.35	ND(0.0711) R	ND(0.0711) R	0.287	ND(0.18)	0.069 J	ND(0.035) R	0.0488 J	ND(0.0711) R	ND(0.035)	ND(0.35) R
P2RI-47S	09/27/10	23	25	ND(0.0367)	ND(0.0367)	ND(0.0745)	ND(0.0745)	ND(0.0367)	ND(0.189)	ND(0.0367)	ND(0.0367)	ND(0.0367)	ND(0.0745)	ND(0.0367)	ND(0.367)
P2RI-48S	09/29/10	8	9	ND(0.0391)	ND(0.0391)	ND(0.0794)	ND(0.0794)	ND(0.0391)	ND(0.201)	ND(0.0391)	ND(0.0391)	ND(0.0391)	ND(0.0794)	ND(0.0391)	ND(0.391)
P2RI-49S	09/30/10	12	14	ND(0.0404)	ND(0.0404)	ND(0.082)	ND(0.082)	ND(0.0404)	ND(0.208)	ND(0.0404)	ND(0.0404)	ND(0.0404)	ND(0.082)	ND(0.0404)	ND(0.404)
P2RI-50S	11/10/10	8	24	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0734)	ND(0.0361)	ND(0.186)	0.0471 J	ND(0.0361)	ND(0.0361)	ND(0.0734)	ND(0.0361)	ND(0.361) UJ
P2RI-52DF	05/21/11	148.5	150	0.13 J	0.16 J	ND(0.071)	ND(0.071)	0.15 J	ND(0.18)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.071)	ND(0.035)	ND(0.35)
P2RI-52S	05/23/11	17	18	0.039 J	0.053 J	ND(0.072)	ND(0.072)	0.051 J	ND(0.18)	0.038 J	ND(0.036)	ND(0.036)	ND(0.072)	ND(0.036)	ND(0.36)
P2RI-53S	05/24/11	12	14	ND(0.041)	ND(0.041)	ND(0.082)	ND(0.082)	ND(0.041)	ND(0.21)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.082)	ND(0.041)	ND(0.41)
P2RI-54SL	05/21/11	95	97	ND(0.038)	ND(0.038)	ND(0.076)	ND(0.076)	ND(0.038)	ND(0.19)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.076)	ND(0.038)	ND(0.38)
P2RI-54SU	05/24/11	0	13	ND(0.041)	ND(0.041)	ND(0.082)	ND(0.082)	ND(0.041)	ND(0.2)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.082)	ND(0.041)	ND(0.41)
P2RI-55DF	10/27/11	128	133	0.061	0.083	ND(0.017)	ND(0.017)	0.076	ND(0.17)	0.011 J	ND(0.017)	0.007 J	ND(0.069) UJ	ND(0.035)	ND(0.35)
P2RI-55S	10/29/11	27	29	0.072	0.096	ND(0.018)	ND(0.018)	0.057	ND(0.18)	0.049	ND(0.018)	0.032	ND(0.071)	ND(0.035)	ND(0.35)
P2RI-56DF	10/26/11	72	74	0.062 J	0.077 J	ND(0.019)	ND(0.019)	0.071 JB	ND(0.19) UJ	0.016 J	ND(0.019)	0.011 J	ND(0.076) UJ	ND(0.038)	ND(0.38) R
P2RI-56S	10/31/11	18	22	0.01 J	ND(0.0037)	ND(0.019)	ND(0.019)	0.012 J	ND(0.19)	0.029	ND(0.019)	0.016 J	ND(0.075)	ND(0.038)	ND(0.38)
P2RI-57S	11/02/11	5	6	ND(0.0037)	ND(0.0037)	ND(0.019)	ND(0.019)	ND(0.0037)	ND(0.19)	0.0043 J	ND(0.019)	ND(0.0037)	ND(0.075)	ND(0.037)	ND(0.37)
P2RI-58S	11/01/11	13	14	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.019)	ND(0.019) UJ	ND(0.0038) UJ	ND(0.19)	ND(0.0038) UJ	ND(0.019)	ND(0.0038) UJ	ND(0.076)	ND(0.038) UJ	ND(0.38)
P2RI-59S	11/01/11	11	12	ND(0.0038) UJ	ND(0.0038) UJ	ND(0.019)	ND(0.019) UJ	ND(0.0038) UJ	ND(0.19)	ND(0.0038) UJ	ND(0.019)	ND(0.0038) UJ	ND(0.077)	ND(0.038) UJ	ND(0.38)
P2RI-60S	10/28/11	13	15	ND(0.0042)	ND(0.0042)	ND(0.021)	ND(0.021)	ND(0.0042)	ND(0.21)	ND(0.0042)	ND(0.021)	ND(0.0042)	ND(0.084)	ND(0.042)	ND(0.42)
P2RI-61S	11/02/11	9	10	ND(0.0041)	ND(0.0041)	ND(0.021)	ND(0.021)	ND(0.0041)	ND(0.21)	ND(0.0041)	ND(0.021)	ND(0.0041)	ND(0.083)	ND(0.041)	ND(0.41)
P2RI-62S	11/02/11	4	8	ND(0.0046)	ND(0.0046)	ND(0.023)	ND(0.023)	ND(0.0046)	ND(0.23)	ND(0.0046) UJ	ND(0.023)	ND(0.0046) UJ	ND(0.092)	ND(0.046)	ND(0.46)
P2RI-63S	11/03/11	13.5	14.5	ND(0.0039)	ND(0.0039)	ND(0.02)	ND(0.02)	ND(0.0039)	ND(0.2)	ND(0.0039)	ND(0.02)	ND(0.0039)	ND(0.079)	ND(0.039)	ND(0.39) UJ
PA-5R	11/02/11	9	10	ND(0.0041)	ND(0.0041)	ND(0.02)	ND(0.02)	ND(0.0041)	ND(0.2)	ND(0.0041)	ND(0.02)	ND(0.0041)	ND(0.081)	ND(0.041)	ND(0.41)
Direct Exposure, Subsurface, 5/2013				16	23	310	610	200	NA	NA	1,800	2,000	7.8	0.16	7.8
Migration to Groundwater, Subsurface, 5/2013				0.051	1.4	5.8	11	9	NA	NA	1.73	4,000	0.053	0.00068	0.086

Notes:
mg/kg - milligrams per kilogram
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated Reporting Limit
JB - Estimated concentration due to blank contamination
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Soil Standard or RBSL does not exist

TABLE 4.7-5. ANALYTICAL RESULTS, EPH-VPH, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Method	Total Extractable Hydrocarbons (mg/kg)	C5-C8, Aliphatic, Adjusted (mg/kg)	C9-C10, Aromatic, Adjusted (mg/kg)	C9-C12, Aliphatic, Adjusted (mg/kg)	C9-C18, Aliphatic, Adjusted (mg/kg)	C11-C22, Aromatic, Adjusted (mg/kg)	C19-C36, Aliphatic, Adjusted (mg/kg)	Total Purgable Hydrocarbons (mg/kg)
GW-4R	10/31/11	10	11	MA-VPH	--	ND(2.92)	ND(2.92)	ND(2.92)	--	--	--	ND(2.92)
GW-16R	10/11/10	8.5	9.5	MA-VPH	--	246 J	145 J	199 J	--	--	--	597
GW-17R	10/31/11	9	10	MA-VPH	--	ND(2.9) UJ	ND(2.9)	ND(2.9)	--	--	--	ND(2.9)
GW-20D	10/20/10	16.5	18.5	MA-VPH	--	ND(2.78)	ND(2.78)	ND(2.78)	--	--	--	ND(2.78)
GW-20RS Dup	10/20/10	8	11.5	MA-VPH	--	ND(2.78)	ND(2.78)	ND(2.78)	--	--	--	ND(2.78)
GW-20RS	10/20/10	8	11.5	MA-VPH	--	ND(2.84)	ND(2.84)	ND(2.84)	--	--	--	ND(2.84)
GW-A	11/06/10	60	60	MA-VPH	--	21.4 J	22.9 J	38.2 J	--	--	--	88.4 J
GW-C-25	11/07/10	39	39	MA-VPH	--	4.1 J	ND(2.74) UJ	3.78 J	--	--	--	8.35 J
GW-C-46S	09/29/10	24	25	MA-VPH	--	ND(2.67)	ND(2.67)	ND(2.67)	--	--	--	2.71 J
GW-C-47S Dup	09/28/10	16	17	MA-VPH	--	32.4 J	34.9 J	33.4 J	--	--	--	120 J
GW-C-47S	09/28/10	16	17	MA-VPH	--	38.8 J	28.5 J	23.3 J	--	--	--	114 J
GW-C-48	11/06/10	27	27	MA-VPH	--	16.4 J	29.8 J	37.5 J	--	--	--	99.8 J
GW-CD	11/04/10	65	66	MA-VPH	--	7.77 J	4.86 J	ND(2.8)	--	--	--	16.1
GW-CDF Dup	11/07/10	109	110	MA-VPH	--	8.86 J	4.58 J	3.32 J	--	--	--	19.9 J
GW-CDF	11/07/10	109	110	MA-VPH	--	13.3 J	4.42 J	5.72 J	--	--	--	26.6 J
GW-CS	11/04/10	17	18	MA-VPH	--	ND(2.88) UJ	ND(2.88)	ND(2.88)	--	--	--	ND(2.88)
GW-D Dup	11/05/10	49	51	MA-VPH	--	4.64 J	ND(2.65) UJ	3.93 J	--	--	--	10.1 J
GW-D	11/05/10	49	51	MA-VPH	--	4.04 J	3.48 J	ND(2.67) UJ	--	--	--	8.43 J
GW-ED Dup	11/08/10	64	64	MA-VPH	--	5.24 J	4.84 J	ND(2.74)	--	--	--	12.4
GW-ED	11/08/10	64	64	MA-VPH	--	6.53 J	5.39 J	ND(2.73) UJ	--	--	--	15.2 J
GW-ES Dup	10/14/10	12	16	MA-VPH	--	11.3 J	17.6 J	13 J	--	--	--	44
GW-ES	10/14/10	12	16	MA-VPH	--	5.52 J	13 J	9.29 J	--	--	--	29.4
GW-FS	09/28/10	15	16	MA-VPH	--	ND(2.83)	ND(2.83)	ND(2.83)	--	--	--	ND(2.83)
GW-GS	09/27/10	15	16	MA-VPH	--	ND(2.91)	ND(2.91)	ND(2.91)	--	--	--	ND(2.91)
GW-GS	09/29/10	8	9	MA-VPH	--	ND(2.93)	ND(2.93)	ND(2.93)	--	--	--	ND(2.93)
GW-K	09/10/10	39	40	MA-VPH	--	39 J	4.76 J	20.1 J	--	--	--	64 J
GW-L	05/07/11	29	31	MA-VPH	--	2.89 J	ND(2.84)	3.72 J	--	--	--	7.03
GW-MS	09/28/10	14	15	MA-VPH	--	3.4 J	ND(2.75)	ND(2.75)	--	--	--	3.4 J
GW-NS Dup	12/04/10	9	10	MA-VPH	--	ND(3.35)	ND(3.35)	ND(3.35)	--	--	--	ND(3.39)
GW-NS	12/04/10	9	10	MA-VPH	--	ND(3.39)	ND(3.39)	ND(3.39)	--	--	--	ND(3.35)
P2RI-1D	01/10/10	20	21	MA-VPH	--	ND(2.73)	ND(2.73)	ND(2.73)	--	--	--	ND(2.73)
P2RI-1D	01/10/10	51	52	MA-VPH	--	10.2 J	3.63 J	4.39 J	--	--	--	20.2 J
P2RI-3D	01/09/10	79	81	MA-VPH	--	17.7 J	6.03 J	7.49 J	--	--	--	34.8 J
P2RI-3S	12/20/09	16	18	MA-VPH	--	ND(2.85)	ND(2.85)	ND(2.85)	--	--	--	ND(2.85)
P2RI-4S	12/16/09	21	25	MA-VPH	--	1660 J	82.1	379 J	--	--	--	2180 J
P2RI-4D	01/11/10	34	36	MA-VPH	--	5.06 J	ND(2.63)	ND(2.63)	--	--	--	5.21 J
P2RI-5S	05/06/11	11	12	MA-VPH	--	15.2 J	5.22 J	4 J	--	--	--	26.7
P2RI-6	12/16/09	24	27	MA-VPH	--	561 J	94.7 J	217 J	--	--	--	918 J
P2RI-8	12/17/09	33	33	MA-VPH	--	54 J	16.2 J	28.5 J	--	--	--	118 J
P2RI-9D	01/24/10	50	53	MA-VPH	--	10.1 J	5.69 J	5.35 J	--	--	--	22.8 J
P2RI-9S Dup	12/20/09	15	16	MA-VPH	--	ND(2.98)	ND(2.98)	ND(2.98)	--	--	--	ND(2.98)
P2RI-9S	12/20/09	15	16	MA-VPH	--	ND(2.88)	ND(2.88)	ND(2.88)	--	--	--	ND(2.88)
P2RI-9S	12/20/09	24	26	MA-VPH	--	4.08 J	ND(3.06)	ND(3.06)	--	--	--	4.08 J
P2RI-10D	01/20/10	67	72	MA-VPH	--	3.8 J	ND(2.4)	2.54 J	--	--	--	7.66
P2RI-10S	01/11/10	14	16	MA-VPH	--	ND(2.72)	ND(2.72)	ND(2.72)	--	--	--	ND(2.72)
P2RI-11D	01/10/10	59	60	MA-VPH	--	8.83 J	3.34 J	5.31 J	--	--	--	19.9 J
P2RI-11S	01/09/10	9	9	MA-VPH	--	ND(2.8)	ND(2.8)	ND(2.8)	--	--	--	ND(2.8)
P2RI-11S	01/09/10	19	19	MA-VPH	--	ND(2.74)	ND(2.74)	ND(2.74)	--	--	--	ND(2.74)
P2RI-12	01/19/10	7	12	MA-VPH	--	ND(2.62)	ND(2.62)	ND(2.62)	--	--	--	ND(2.62)
P2RI-13 Dup	01/12/10	22	24	MA-VPH	--	39.1 J	9.5 J	14.8 J	--	--	--	82.9 J
P2RI-13	01/12/10	22	24	MA-VPH	--	30 J	14.9 J	19.9 J	--	--	--	81.9 J
P2RI-14	12/19/09	13	16	MA-VPH	--	13.8 J	14	22.4 J	--	--	--	50.1 J
P2RI-15	01/19/10	5	10	MA-VPH	--	ND(2.57)	ND(2.57)	ND(2.57)	--	--	--	ND(2.57)
P2RI-16D	10/27/10	18	19	MA-VPH	--	ND(2.71)	ND(2.71)	ND(2.71)	--	--	--	ND(2.71)
P2RI-16S	12/19/09	13	16	MA-VPH	--	ND(2.77)	ND(2.77)	ND(2.77)	--	--	--	ND(2.77)
P2RI-17	12/19/09	12	13	MA-VPH	--	ND(2.86)	ND(2.86)	ND(2.86)	--	--	--	ND(2.86)
P2RI-18	12/21/09	11	12	MA-VPH	--	ND(2.96) UJ	ND(2.96)	ND(2.96) UJ	--	--	--	ND(2.96)
P2RI-18D	10/11/10	15.5	16.5	MA-VPH	--	ND(3.01)	ND(3.01)	ND(3.01)	--	--	--	ND(3.01)
P2RI-18SR	10/11/10	9	10	MA-VPH	--	ND(2.88)	ND(2.88)	ND(2.88)	--	--	--	ND(2.88)
P2RI-19D	10/26/10	22.5	22.5	MA-VPH	--	ND(3.23)	ND(3.23)	ND(3.23)	--	--	--	ND(3.23)
P2RI-19S	12/18/09	9.5	10.5	MA-VPH	--	ND(3.18)	ND(3.18)	ND(3.18)	--	--	--	ND(3.18)
P2RI-20	12/18/09	14.5	15.5	MA-VPH	--	ND(2.96)	ND(2.96)	ND(2.96)	--	--	--	ND(2.96)
P2RI-21S	12/18/09	30	32	MA-VPH	--	14.9 J	5.34 J	10 J	--	--	--	31.2
P2RI-21S Dup	10/11/10	14	14	MA-VPH	--	ND(2.82)	ND(2.82)	ND(2.82)	--	--	--	ND(2.82)
P2RI-21S	10/11/10	14	14	MA-VPH	--	ND(2.91)	ND(2.91)	ND(2.91)	--	--	--	ND(2.91)
P2RI-22S	12/17/09	15	15	MA-VPH	--	ND(2.9)	ND(2.9)	ND(2.9)	--	--	--	ND(2.9)
P2RI-23D	10/26/10	22.4	22.8	MA-VPH	--	ND(3.63)	ND(3.63)	ND(3.63)	--	--	--	ND(3.63)
P2RI-23S	12/17/09	14	19	MA-VPH	--	ND(2.85)	ND(2.85)	ND(2.85)	--	--	--	ND(2.85)
P2RI-24D	11/03/10	47	48	MA-VPH	--	ND(2.78) UJ	ND(2.78)	ND(2.78)	--	--	--	ND(2.78)
P2RI-24S	01/19/10	7	9	MA-VPH	--	ND(2.62)	ND(2.62)	ND(2.62)	--	--	--	ND(2.62)
P2RI-25S	12/19/09	16	18	MA-VPH	--	ND(2.75)	ND(2.75)	ND(2.75)	--	--	--	ND(2.75)
P2RI-26D	10/26/10	23.8	24.8	MA-VPH	--	6.94	ND(2.84)	ND(2.84)	--	--	--	17.1
P2RI-26S Dup	10/08/10	15.5	16.5	MA-VPH	--	ND(2.82)	ND(2.82)	ND(2.82)	--	--	--	ND(2.82)
P2RI-26S	10/08/10	15.5	16.5	MA-VPH	--	ND(2.8)	ND(2.8)	ND(2.8)	--	--	--	ND(2.8)
P2RI-27D Dup	05/10/11	59	61	MA-VPH	--	3.99 J	4.52 J	ND(2.52)	--	--	--	9.86
P2RI-27D	05/10/11	59	61	MA-VPH	--	3.55 J	4.5 J	ND(2.64)	--	--	--	9.13
P2RI-27DF	05/09/11	85	86	MA-VPH	--	53.3 J	151 J	131 J	--	--	--	352
P2RI-27S	11/10/10	14.5	14.5	MA-VPH	--	ND(3.31) UJ	ND(3.31)	ND(3.31)	--	--	--	ND(3.31)
P2RI-28S	11/03/11	9	10	MA-VPH	--	ND(3.25)	ND(3.25)	ND(3.25)	--	--	--	ND(3.25)
P2RI-29S	11/03/11	14.5	15.5	MA-VPH	--	ND(2.96)	ND(2.96)	ND(2.96) UJ	--	--	--	ND(2.96)
P2RI-30S	11/03/11	5	6	MA-EPH	1200	--	--	--	400	310	440	261 J
P2RI-30S	11/03/11	5	6	MA-VPH	--	6.75 J	128 J	126 J	--	--	--	--
P2RI-31S	11/02/11	9.5	10.5	MA-EPH	3800 J	--	--	--	1200	770 J	1800	327
P2RI-31S	11/02/11	9.5	10.5	MA-VPH	--	19.4	142 J	164	--	--	--	--
P2RI-32S	11/02/11	7	10	MA-EPH	760	--	--	--	240	200	320	502 J
P2RI-32S	11/02/11	7	10	MA-VPH	--	66.7	153 J	277	--	--	--	--
P2RI-33D	10/07/10	44	45	MA-VPH	--	10.7 J	4.41 J	6.32 J	--	--	--	22.5
P2RI-33S	09/27/10	17	18	MA-VPH	--	ND(2.68)	ND(2.68)	ND(2.68)	--	--	--	ND(2.68)
P2RI-34D	09/25/10	42	47	MA-VPH	--	12.3 J	6.52 J	6.42 J	--	--	--	26.8 J
P2RI-34S	09/11/10	20	21	MA-VPH	--	ND(2.7)	ND(2.7)	3.31 J	--	--	--	3.31 J
P2RI-35D	09/25/10	98	100.5	MA-VPH	--	17.7 J	7.39 J	8.67 J	--	--	--	37.5 J
P2RI-35S	09/11/10	19	20	MA-VPH	--	ND(2.72)	ND(2.72)	ND(2.72)	--	--	--	ND(2.72)
P2RI-36DF	09/14/10	117	118	MA-VPH	--	12.2 J	6.75 J	12.1 J	--	--	--	34.5 J

TABLE 4.7-5. ANALYTICAL RESULTS, EPH-VPH, P2RI SOIL SAMPLES COLLECTED DURING WELL INSTALLATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Name	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Method	Total Extractable Hydrocarbons (mg/kg)	C5-C8, Aliphatic, Adjusted (mg/kg)	C9-C10, Aromatic, Adjusted (mg/kg)	C9-C12, Aliphatic, Adjusted (mg/kg)	C9-C18, Aliphatic, Adjusted (mg/kg)	C11-C22, Aromatic, Adjusted (mg/kg)	C19-C36, Aliphatic, Adjusted (mg/kg)	Total Purgable Hydrocarbons (mg/kg)
P2RI-36S Dup	09/15/10	21	23	MA-VPH	--	3.26 J	ND(2.72)	3.26 J	--	--	--	6.82 J
P2RI-36S	09/15/10	21	23	MA-VPH	--	ND(2.81)	ND(2.81)	ND(2.81)	--	--	--	ND(2.81)
P2RI-37D	05/08/11	44	45	MA-VPH	--	8.38 J	3.64 J	2.87 J	--	--	--	15.9
P2RI-37S Dup	09/27/10	18	19	MA-VPH	--	ND(2.87)	ND(2.87)	ND(2.87)	--	--	--	ND(2.87)
P2RI-37S	09/27/10	18	19	MA-VPH	--	ND(2.83)	ND(2.83)	ND(2.83)	--	--	--	ND(2.83)
P2RI-38S	09/11/10	13	14	MA-VPH	--	ND(2.78)	ND(2.78)	ND(2.78)	--	--	--	ND(2.78)
P2RI-39S	09/10/10	12	13	MA-VPH	--	ND(2.87)	ND(2.87)	ND(2.87)	--	--	--	ND(2.87)
P2RI-41D	09/23/10	64	64	MA-EPH	262	--	--	--	63.2	131	72.7	22.4 J
PRRI-41D	09/23/10	64	64	MA-VPH	--	10.6 J	5.11 J	5.42 J	--	--	--	--
P2RI-41S	09/10/10	14	15	MA-VPH	--	ND(2.76)	ND(2.76)	ND(2.76)	--	--	--	ND(2.76)
P2RI-43S	09/10/10	23	25	MA-VPH	--	115 J	50.1 J	192 J	--	--	--	369 J
P2RI-44D	11/18/10	85	87	MA-VPH	--	6.16 J	ND(2.63)	4.43 J	--	--	--	12.3 J
P2RI-44S	09/11/10	20	21	MA-VPH	--	ND(2.73)	ND(2.73)	ND(2.73)	--	--	--	ND(2.73)
P2RI-44SR	05/06/11	27	29	MA-VPH	--	ND(3.32)	ND(3.32)	ND(3.32)	--	--	--	ND(3.32)
P2RI-45D	05/05/11	33	35	MA-VPH	--	4.41 J	2.83 J	ND(2.58)	--	--	--	9.73
P2RI-45E	05/05/11	13	14	MA-EPH	1100	--	--	--	350	200	510	494 J
P2RI-45E	05/05/11	13	14	MA-VPH	--	94.5 J	146	250 J	--	--	--	--
P2RI-45S	09/11/10	6	7	MA-EPH	1580 J	--	--	--	495	428	664	68.2
P2RI-45S	09/11/10	6	7	MA-VPH	--	ND(2.73)	22.5	45.8	--	--	--	--
P2RI-45S	09/11/10	14	15	MA-EPH	86.6 J	--	--	--	71	15.5	ND(13.3)	75.4 J
P2RI-45S	09/11/10	14	15	MA-VPH	--	28.7 J	14.8 J	22.2 J	--	--	--	--
P2RI-46D	09/12/10	65	66	MA-VPH	--	33.6 J	2.95 J	6.83 J	--	--	--	47.9 J
P2RI-46DFL	09/14/10	90	91	MA-VPH	--	5.83	ND(2.65)	5.33	--	--	--	13 J
P2RI-46S	09/10/10	18	19	MA-VPH	--	53.2 J	40.3 J	96.1 J	--	--	--	208 J
P2RI-47DF	09/28/10	88	90.5	MA-VPH	--	8.35 J	4.35 J	3.66 J	--	--	--	18.6 J
P2RI-47S	09/27/10	23	25	MA-VPH	--	ND(2.74)	ND(2.74)	ND(2.74)	--	--	--	ND(2.74)
P2RI-48S	09/29/10	8	9	MA-VPH	--	ND(2.96)	ND(2.96)	ND(2.96)	--	--	--	ND(2.96)
P2RI-49S	09/30/10	12	14	MA-VPH	--	ND(3.02)	ND(3.02)	ND(3.02)	--	--	--	ND(3.02)
P2RI-50S	11/10/10	8	24	MA-VPH	--	ND(3.59) UJ	ND(3.59)	ND(3.59)	--	--	--	ND(3.59)
P2RI-52DF	05/21/11	148.5	150	MA-VPH	--	4.54 J	ND(2.82)	4.34 J	--	--	--	10.9
P2RI-52S	05/23/11	17	18	MA-VPH	--	ND(2.61)	ND(2.61)	ND(2.61)	--	--	--	ND(2.61)
P2RI-53S	05/24/11	12	14	MA-VPH	--	ND(3.18)	ND(3.18)	ND(3.18)	--	--	--	ND(3.18)
P2RI-54SL	05/21/11	95	97	MA-VPH	--	ND(2.92)	ND(2.92)	ND(2.92)	--	--	--	ND(2.92)
P2RI-54SU	05/24/11	0	13	MA-VPH	--	ND(3.06)	ND(3.06)	ND(3.06)	--	--	--	ND(3.06)
P2RI-55DF	10/27/11	128	133	MA-VPH	--	9.57 J	3.42 J	ND(2.56)	--	--	--	17.6 J
P2RI-55S	10/29/11	27	29	MA-VPH	--	ND(2.67) UJ	ND(2.67)	ND(2.67)	--	--	--	ND(2.67)
P2RI-56DF	10/26/11	72	74	MA-VPH	--	7.85 J	ND(2.97) UJ	5.32 J	--	--	--	15 J
P2RI-56S	10/31/11	18	22	MA-VPH	--	ND(2.82) UJ	ND(2.82)	ND(2.82)	--	--	--	ND(2.82)
P2RI-57S	11/02/11	5	6	MA-VPH	--	ND(2.94)	ND(2.94)	ND(2.94)	--	--	--	ND(2.94)
P2RI-58S	11/01/11	13	14	MA-VPH	--	ND(2.78) UJ	ND(2.78)	ND(2.78)	--	--	--	ND(2.78)
P2RI-59S	11/01/11	11	12	MA-VPH	--	ND(2.96) UJ	ND(2.96)	ND(2.96)	--	--	--	ND(2.96)
P2RI-60S	10/28/11	13	15	MA-VPH	--	ND(3.15) UJ	ND(3.15)	ND(3.15)	--	--	--	ND(3.15)
P2RI-61S	11/02/11	9	10	MA-VPH	--	ND(3.64)	ND(3.64)	ND(3.64)	--	--	--	ND(3.64)
P2RI-62S	11/02/11	4	8	MA-VPH	--	ND(3.83)	ND(3.83)	ND(3.83)	--	--	--	ND(3.83)
P2RI-63S	11/03/11	13.5	14.5	MA-VPH	--	ND(3.03)	ND(3.03)	ND(3.03)	--	--	--	ND(3.03)
PA-5R	11/02/11	9	10	MA-VPH	--	ND(3.5)	ND(3.5)	ND(3.5)	--	--	--	ND(3.5)
	Direct Exposure, Subsurface, 5/2013				NA*	500	1,000	1,000	2,000	4,000	100,000	NA*
	Migration to Groundwater, Subsurface, 5/2013				NA*	200	100	10,000	50,000	400	NA	NA*

Notes:
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/kg - milligrams per killogram
ft-bgs - feet below ground surface
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/kg provided in parentheses
J - Estimated concentration
RBSL - Risk Based Screening Level
NA - Soil Standard or RBSL does not exist
* - For EPH compounds the 200 mg/kg screen concentration is used to determine if additional analysis (fractionation) of the soil sample is needed.
The method detection limit (MDL) was used as the reporting limit.

TABLE 4.8-1. ANALYTICAL RESULTS, DRINKING WATER INVESTIGATION, P2RI GROUNDWATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Bromo- dichloro- methane[1] (mg/L)	Bromoform[1] (mg/L)	Chloroform[1] (mg/L)	Dibromo- chloromethane[1] (mg/L)
GW-C-46S	09/21/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS	09/21/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CS Dup	09/21/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW-CD	09/21/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
GW-H	09/21/11	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Groundwater RBSLs and Standards (mg/L):		0.01	0.08	0.07	0.004

Notes:

[1] - Result is from laboratory analytical method EPA 524.2

mg/L - milligrams per liter

ND - Not detected

RBSL - Risk Based Screening Level

TABLE 4.10-1. HYDROCARBON FORENSIC SAMPLING LOCATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Location Type	Matrix	Sample Date 1	Sample Date 2	Sample Date 3	Laboratory
C	Deep Sonic Boring	Water	11/14/07	N/A	N/A	Newfields
C-25	Deep Sonic Boring	Water	03/05/08	N/A	N/A	Newfields
C-29	Deep Sonic Boring	LNAPL	10/26/07	N/A	N/A	Newfields
C-45	Deep Sonic Boring	Water	11/13/07	N/A	N/A	Newfields
C-46	Deep Sonic Boring	Water	11/14/07	N/A	N/A	Newfields
C-47	Deep Sonic Boring	LNAPL	11/08/07	N/A	N/A	Newfields
C-48	Deep Sonic Boring	Water	03/05/08	N/A	N/A	Newfields
D	Deep Sonic Boring	Water	11/14/07	N/A	N/A	Newfields
E	Deep Sonic Boring	LNAPL	03/18/09	03/19/09	N/A	ChevronETC & Newfields
GW-12	Monitoring Well	Water	11/03/09	11/01/10	02/21/12	Newfields
GW-13	Monitoring Well	LNAPL	02/26/09	03/18/09	N/A	ChevronETC & Newfields
GW-14	Monitoring Well	Water	11/03/09	11/01/10	02/21/12	Newfields
GW-16	Monitoring Well	Water	11/12/07	11/03/09	N/A	Newfields
GW-19	Monitoring Well	Water	11/03/09	11/01/10	02/21/12	Newfields
GW-21	Monitoring Well	Water	11/03/09	N/A	N/A	Newfields
GW-31	Monitoring Well	Water	11/13/07	N/A	N/A	Newfields
GW-6R	Monitoring Well	Water	11/03/09	N/A	N/A	Newfields
H	Deep Sonic Boring	Water	03/05/08	N/A	N/A	Newfields
I	Deep Sonic Boring	LNAPL	11/08/07	N/A	N/A	Newfields
J	Deep Sonic Boring	Water	11/14/07	N/A	N/A	Newfields
LSSI-10	Temporary Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-15	Temporary Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-16	Temporary Monitoring Well	LNAPL	11/04/06	11/08/07	N/A	ChevronETC & Newfields
LSSI-21	Temporary Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-29	Temporary Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-32	Temporary Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-36	Temporary Monitoring Well	LNAPL	03/19/08	N/A	N/A	ChevronETC & Newfields
LSSI-43	Temporary Monitoring Well	Water	03/05/08	N/A	N/A	Newfields
LSSI-44	Temporary Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-6	Monitoring Well	Water	11/14/07	N/A	N/A	Newfields
LSSI-7	Temporary Monitoring Well	LNAPL	05/20/10	N/A	N/A	Newfields
LSSI-9	Temporary Monitoring Well	LNAPL	07/25/07	11/08/07	N/A	ChevronETC & Newfields
M	Deep Sonic Boring	LNAPL	10/26/07	N/A	N/A	Newfields
MWD-1	WET Monitoring Well	LNAPL	03/19/08	N/A	N/A	ChevronETC & Newfields

TABLE 4.10-1. HYDROCARBON FORENSIC SAMPLING LOCATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Location Type	Matrix	Sample Date 1	Sample Date 2	Sample Date 3	Laboratory
P2RI-14	Monitoring Well	Water	11/01/10	02/21/12	N/A	Newfields
P2RI-45E	Monitoring Well	LNAPL	08/26/11	N/A	N/A	Newfields
P2RI-46DFU	Monitoring Well	Water	02/22/12	N/A	N/A	Newfields
P2RI-56DF	Monitoring Well	Water	03/22/12	N/A	N/A	Newfields
PA-1	Temporary Monitoring Well	LNAPL	11/04/06	11/14/07	N/A	ChevronETC & Newfields
PA-6	Temporary Monitoring Well	Water	03/05/08	N/A	N/A	Newfields
PTA1	Pilot Test Well	LNAPL	10/30/06	N/A	N/A	ChevronETC
PTA3-EXT	Pilot Test Well	Water	11/14/07	N/A	N/A	Newfields
SDW-11S	Monitoring Well	Water	11/03/09	11/01/10	02/21/12	Newfields
SDW-20D	WET Monitoring Well	LNAPL	04/24/10	05/18/10	N/A	ChevronETC & Newfields
SDW-21D	WET Monitoring Well	LNAPL	04/23/10	05/18/10	N/A	ChevronETC & Newfields
SDW-24D	WET Monitoring Well	LNAPL	05/19/10	N/A	N/A	ChevronETC & Newfields
SDW-31	WET Monitoring Well	LNAPL	04/24/10	05/18/10	N/A	ChevronETC & Newfields
SDW-5	Monitoring Well	LNAPL	04/30/08	05/01/08	N/A	ChevronETC & Newfields
SDW-8S	Monitoring Well	Water	11/03/09	11/01/10	02/21/12	Newfields
SI-1	Soil Boring	Soil	01/10/07	N/A	N/A	ChevronETC
TB10-D03-DP01	Soil Boring	LNAPL	10/29/12	N/A	N/A	Newfields
TB10-F05-DP01	Soil Boring	LNAPL	10/28/09	N/A	N/A	Newfields
TB18-E05-DP01	Soil Boring	LNAPL	11/15/09	N/A	N/A	Newfields
TB23-E04-DP01	Soil Boring	Water	11/04/09	N/A	N/A	Newfields
VCP06-A02-DP01	Soil Boring	Soil	04/14/11	N/A	N/A	Newfields
VW-2-WET	WET Monitoring Well	LNAPL	03/19/08	N/A	N/A	ChevronETC & Newfields

ChevronETC - Chevron (or ChevronTexaco, prior to 2007) Energy Technology Company
LNAPL - Light non-aqueous phase liquid
WET - Water and Environmental Technologies
N/A - not available

TABLE 5.1-1. ANALYTICAL RESULTS, INORGANIC CONSTITUENTS, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	Antimony, Total[1] (mg/L)	Antimony, Dissolved[1] (mg/L)	Arsenic, Total[1] (mg/L)	Arsenic, Dissolved[1] (mg/L)	Barium, Total[2] (mg/L)	Barium, Dissolved[2] (mg/L)	Beryllium, Total[1] (mg/L)	Beryllium, Dissolved[1] (mg/L)	Cadmium, Total[2] (mg/L)	Cadmium, Dissolved[2] (mg/L)	Chromium, Total[2] (mg/L)
DRAINAGE 01	02/12/10	SW	0.0011 J	--	0.011	--	0.0414	--	ND(0.00013)	--	ND(0.01)	--	ND(0.017)
SD01-030310SW	03/03/10	SW	0.0004 J	--	0.0044	--	0.0455	--	ND(0.00013)	--	ND(0.002)	--	0.004 J
SD02-030310SW	03/03/10	SW	ND(0.0003)	--	0.002 J	--	0.0714	--	ND(0.00013)	--	ND(0.002)	--	0.0044 J
SD03-030310SW	03/03/10	SW	ND(0.0003)	--	0.0014 J	--	0.0546	--	ND(0.00013)	--	ND(0.002)	--	ND(0.0034)
SD08-030310SW	03/03/10	SW	ND(0.0003)	--	0.0023	--	0.0581	--	ND(0.00013)	--	ND(0.002)	--	0.005 J
SD01-031810-SW	03/18/10	SW	ND(0.0015)	--	0.0743	--	0.224	--	0.0058	--	ND(0.01)	--	0.0988
SD01-042210-SW	04/22/10	SW	0.0148 J	--	0.111 J	--	0.0508 J	--	ND(0.0013) UJ	--	ND(0.02)	--	ND(0.034) UJ
SD01-042310-SW	04/23/10	SW	0.0088 J	--	0.0926 J	--	0.105 J	--	ND(0.0013) UJ	--	ND(0.02)	--	ND(0.034) UJ
SD01-052110-SW1	05/21/10	SW	--	0.00034 J	--	0.0037	--	0.0312	--	ND(0.00065) UJ	--	ND(0.01)	--
SD01-052110-SW2	05/21/10	SW	--	0.0003 J	--	0.0021	--	0.0187 J	--	ND(0.00013)	--	ND(0.01)	--
SD01-061610SW1	06/16/10	SW	0.0039 J	ND(0.003)	0.0268	0.018 J	0.0291	0.0245 J	ND(0.0013)	ND(0.0013)	ND(0.01)	ND(0.01)	ND(0.017)
SD01-061610SW2	06/16/10	SW	ND(0.0015)	ND(0.0015)	0.0121	0.0085 J	0.0276	0.0142	ND(0.00065)	ND(0.00065)	ND(0.002)	ND(0.002)	0.0037 J
SD01-061610SW2 Dup	06/16/10	SW	ND(0.0015)	ND(0.0015)	0.0124	0.0092 J	0.0243	0.0144	ND(0.00065)	ND(0.00065)	ND(0.002)	ND(0.002)	0.0035 J
SD07-061610SW	06/16/10	SW	ND(0.0003)	ND(0.0003)	0.0047	0.0021	0.19	0.0734	0.00025 JB	ND(0.00013)	ND(0.002)	ND(0.002)	0.0103 J
SD01-072010SW1	07/20/10	SW	ND(0.003)	ND(0.003)	0.0296 J	0.0251 J	0.0726 J	0.0331 J	ND(0.0013)	ND(0.0013)	ND(0.01)	ND(0.01) UJ	0.0204 J
SD01-072010SW1 Dup	07/20/10	SW	--	ND(0.0015)	--	ND(0.0048)	--	0.012 J	--	ND(0.00065)	--	ND(0.01)	--
SD01-072010SW2	07/20/10	SW	0.0016 J	ND(0.0015)	0.0113 J	0.0072 J	0.0632 J	0.0184 J	ND(0.00065)	ND(0.00065)	ND(0.01)	ND(0.01) UJ	ND(0.017)
SD01-072010SW2 Dup	07/20/10	SW	ND(0.0015)	ND(0.0015)	0.0052 J	ND(0.0048) UJ	0.0177 J	0.012 J	ND(0.00065)	ND(0.00065)	ND(0.01)	ND(0.01) UJ	ND(0.017)
SD03-072010SW	07/20/10	SW	0.00056 J	0.00066 J	0.0351 J	0.0196 J	0.461 J	0.0602 J	0.00056	ND(0.00013)	ND(0.002)	ND(0.002) UJ	0.0164
SD01-NSUMP-SW	08/10/10	SW	ND(0.0015)	0.0019 J	0.0826	0.0198	0.415	0.0273	0.0043 J	ND(0.00065)	ND(0.01)	ND(0.01)	0.108
SD01-SSUMP-SW	08/10/10	SW	0.0038 J	0.0019 J	0.0772	0.0196	0.128	0.0246 J	0.0017 J	ND(0.00065)	ND(0.02)	ND(0.02)	0.0554 J
SD01-092010SW1	09/09/10	SW	0.00059 J	0.00068 J	0.0835	0.004	1.58	0.0189	0.0052	ND(0.00013)	0.0103	ND(0.002)	0.152
SD01-092010SW2	09/09/10	SW	0.0012	0.00074 J	0.031	0.0075	0.413	0.0176 J	0.0015	ND(0.00013)	ND(0.002)	ND(0.01)	0.0402
SD01-NSUMP-SW	12/14/10	SW	ND(0.006) UJ	ND(0.006) UJ	0.037 J	ND(0.019)	0.257 J	0.0253 J	ND(0.0026)	ND(0.0026)	ND(0.01)	ND(0.01)	0.0451 J
SD01-SSUMP-SW	12/14/10	SW	ND(0.006) UJ	ND(0.006) UJ	ND(0.019)	ND(0.019)	0.0561 J	0.0179 J	ND(0.0026)	ND(0.0026)	ND(0.01)	ND(0.01)	ND(0.017)
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.006) UJ	ND(0.006) UJ	ND(0.019)	ND(0.019)	0.0597 J	0.0181 J	ND(0.0026)	ND(0.0026)	ND(0.01)	ND(0.01)	ND(0.017)
SD08-052111SW	05/21/11	SW	0.00052 J	--	0.0963	--	2.63	--	0.0106	--	0.0101	--	0.287
SD01-TP-01	03/26/12	GW	ND(0.0021)	ND(0.0021)	ND(0.0048)	ND(0.0048)	0.0558	0.0533	ND(0.0013)	ND(0.0013)	ND(0.0014)	0.0018 J	0.0056 J
SD01-TP-02	03/26/12	GW	ND(0.0021)	ND(0.0021)	ND(0.0048)	ND(0.0048)	0.0584	0.0557	ND(0.0013)	ND(0.0013)	ND(0.0014)	ND(0.0014)	ND(0.0055)
SD01-TP-03	03/26/12	GW	ND(0.0021)	ND(0.0021)	ND(0.0048)	ND(0.0048)	0.0703	0.067	ND(0.0013)	ND(0.0013)	ND(0.0014)	ND(0.0014)	ND(0.0055)
SD01-TP-04	03/26/12	GW	ND(0.0021)	ND(0.0021)	ND(0.0048)	ND(0.0048)	0.059	0.0435	ND(0.00065)	ND(0.00065)	ND(0.00027)	ND(0.00027)	0.0034 J
SD01-07042012-SW4	07/04/12	SW	0.0027 J	--	0.0316 J	--	0.0661	--	ND(0.00025) UJ	--	ND(0.00036)	--	0.0096 J
SD01-07042012-SW5	07/04/12	SW	0.0061 J	--	0.0564 J	--	0.11	--	ND(0.00025) UJ	--	ND(0.0018)	--	0.0282 J
SD01-07042012-SW5 Dup	07/04/12	SW	0.0065 J	--	0.0607 J	--	0.131	--	ND(0.0005) UJ	--	ND(0.0018)	--	0.0368 J
SD01-07042012-SW6	07/04/12	SW	0.0031 J	--	0.0339 J	--	0.127	--	ND(0.0005) UJ	--	ND(0.0018)	--	0.0182 J
SD01-SW04-121114	11/14/12	SW	ND(0.0033) UJ	--	0.0381 J	--	0.0412 J	--	ND(0.00025)	--	ND(0.0018)	--	ND(0.0055)
SD01-SW05-121114	11/14/12	SW	ND(0.0033) UJ	--	0.0388 J	--	0.6 J	--	0.0019 J	--	0.0029 J	--	0.0192 J
SD01-SW06-121114	11/14/12	SW	ND(0.0033) UJ	--	0.0096 J	--	0.0455 J	--	ND(0.00025) UJ	--	ND(0.0018)	--	0.0061 J
SD01-SW01-121115	11/15/12	SW	ND(0.0033)	--	0.0076 J	--	0.0487 J	--	ND(0.00025)	--	ND(0.0018)	--	0.0065 JB
SD01-SW02-121115	11/15/12	SW	ND(0.0033)	--	0.0079 J	--	0.0405 J	--	ND(0.0005)	--	ND(0.0018)	--	ND(0.0055) UJ
SD01-SW03-121115	11/15/12	SW	ND(0.0033)	--	0.0158 J	--	0.0756 J	--	ND(0.0005)	--	ND(0.0018)	--	ND(0.0055) UJ
SD01-TP-01	11/15/12	GW	ND(0.0033)	--	ND(0.004)	--	0.0158 J	--	ND(0.00025)	--	0.001 J	--	0.0032 JB
SD01-TP-02	11/15/12	GW	ND(0.0033)	--	ND(0.004)	--	0.0176 J	--	ND(0.00025)	--	ND(0.0018)	--	ND(0.0055) UJ
SD01-TP-02 Dup	11/15/12	GW	ND(0.0033)	--	0.0047 J	--	0.0174 J	--	ND(0.00025)	--	ND(0.0018)	--	ND(0.0055) UJ
SD01-TP-03	11/15/12	GW	ND(0.0033)	--	ND(0.004)	--	0.0138 J	--	ND(0.00025)	--	ND(0.0018)	--	0.0034 JB
SD01-TP-04	11/15/12	GW	ND(0.0033)	--	ND(0.004)	--	0.0109 J	--	ND(0.00025)	--	ND(0.00036)	--	0.0012 JB
Surface Water Quality Standard or RBSL:			0.0056	0.0056	0.01	0.01	1	1	0.004	0.004	0.005	0.005	0.1
Surface Water Background (SD01):			0.0061	NA	0.0683	NA	0.156	NA	0.0019	NA	0.0134	NA	0.032
Groundwater Quality Standard or RBSL:			0.006	0.006	0.01	0.01	1	1	0.004	0.004	0.005	0.005	0.1

TABLE 5.1-1. ANALYTICAL RESULTS, INORGANIC CONSTITUENTS, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	Chromium, Dissolved[2] (mg/L)	Cobalt, Total[2] (mg/L)	Cobalt, Dissolved[2] (mg/L)	Copper, Total[2] (mg/L)	Copper, Dissolved[2] (mg/L)	Cyanide, Total[4] (mg/L)	Lead, Total[2] (mg/L)	Lead, Dissolved[2] (mg/L)	Mercury, Total[3] (mg/L)	Mercury, Dissolved[3] (mg/L)	Nickel, Total[1] (mg/L)	Nickel, Dissolved[1] (mg/L)
DRAINAGE 01	02/12/10	SW	--	ND(0.0105)	--	ND(0.0135) UJ	--	ND(0.005)	ND(0.0345)	--	ND(0.000056) UJ	--	0.0246	--
SD01-030310SW	03/03/10	SW	--	ND(0.0021)	--	0.007 J	--	ND(0.005)	0.0095 J	--	ND(0.000056)	--	0.013	--
SD02-030310SW	03/03/10	SW	--	ND(0.0021)	--	0.0033 J	--	ND(0.005)	ND(0.0069)	--	ND(0.000056)	--	0.0036	--
SD03-030310SW	03/03/10	SW	--	ND(0.0021)	--	0.0028 J	--	ND(0.005)	ND(0.0069)	--	ND(0.000056)	--	0.0022	--
SD08-030310SW	03/03/10	SW	--	ND(0.0021)	--	0.0061 J	--	ND(0.005)	ND(0.0069)	--	ND(0.000056)	--	0.0051	--
SD01-031810-SW	03/18/10	SW	--	0.102	--	0.187	--	ND(0.005)	0.299	--	ND(0.00056)	--	0.221	--
SD01-042210-SW	04/22/10	SW	--	ND(0.021)	--	0.0349 J	--	ND(0.005)	ND(0.069)	--	ND(0.000056)	--	0.337 J	--
SD01-042310-SW	04/23/10	SW	--	ND(0.021)	--	0.0491 J	--	ND(0.005)	ND(0.069)	--	ND(0.000056)	--	0.254 J	--
SD01-052110-SW1	05/21/10	SW	0.0188 J	--	0.032	--	0.0249 J	ND(0.005)	--	ND(0.0345)	--	ND(0.000056) UJ	--	0.11
SD01-052110-SW2	05/21/10	SW	ND(0.017)	--	ND(0.0105)	--	ND(0.0135)	ND(0.005)	--	ND(0.0345)	--	ND(0.000056) UJ	--	0.0186 J
SD01-061610SW1	06/16/10	SW	ND(0.017)	0.0162 J	ND(0.0115)	ND(0.0135)	ND(0.0135)	ND(0.005)	ND(0.0345)	ND(0.0345)	ND(0.000056)	ND(0.000056)	0.0512	0.038
SD01-061610SW2	06/16/10	SW	ND(0.0034)	0.004 J	0.004 J	0.0152	0.0145	ND(0.005)	ND(0.0069)	ND(0.0069)	ND(0.000056)	ND(0.000056)	0.0222	0.017
SD01-061610SW2 Dup	06/16/10	SW	ND(0.0034)	0.0042 J	0.0034 J	0.0145	0.0136	ND(0.005)	ND(0.0069)	ND(0.0069)	ND(0.000056)	ND(0.000056)	0.0272	0.0196
SD07-061610SW	06/16/10	SW	ND(0.0034)	0.0032 J	ND(0.0023)	0.0295	0.0108	ND(0.005)	0.0241	ND(0.0069)	ND(0.000056)	ND(0.000056)	0.0129	0.0045
SD01-072010SW1	07/20/10	SW	ND(0.017) UJ	0.0201 J	0.0168 J	0.0488 J	0.0428 J	ND(0.005)	ND(0.0345) UJ	ND(0.0345) UJ	ND(0.000056) UJ	ND(0.000056) UJ	0.0701	0.0764 J
SD01-072010SW1 Dup	07/20/10	SW	ND(0.017)	--	0.0329 J	--	ND(0.0135)	--	--	ND(0.0345)	--	ND(0.000056)	--	0.0348 J
SD01-072010SW2	07/20/10	SW	ND(0.017) UJ	0.0294	0.0207 J	0.0145 J	ND(0.0135) UJ	ND(0.005)	ND(0.0345) UJ	ND(0.0345) UJ	ND(0.000056) UJ	ND(0.000056) UJ	0.0371	0.0326 J
SD01-072010SW2 Dup	07/20/10	SW	ND(0.017) UJ	0.0364	0.0329 J	ND(0.0135)	ND(0.0135) UJ	ND(0.005)	ND(0.0345) UJ	ND(0.0345) UJ	ND(0.000056) UJ	ND(0.000056) UJ	0.0323	0.0348 J
SD03-072010SW	07/20/10	SW	ND(0.0034) UJ	0.0085	ND(0.0023) UJ	0.0155	ND(0.0027) UJ	ND(0.005)	0.0077 J	ND(0.0069) UJ	ND(0.000056) UJ	ND(0.000056) UJ	0.0238	0.0099 J
SD01-NSUMP-SW	08/10/10	SW	ND(0.017)	0.0595	0.0141 J	0.136	0.0152 J	ND(0.005)	0.208	ND(0.0345)	ND(0.000056)	ND(0.000056)	0.152	0.0319
SD01-SSUMP-SW	08/10/10	SW	ND(0.034)	0.0617	0.0359 J	0.0787 J	0.0298 J	ND(0.005)	ND(0.069)	ND(0.069)	ND(0.000056)	ND(0.000056)	0.129	0.0616
SD01-092010SW1	09/09/10	SW	ND(0.0034)	0.0582	0.0025 J	0.163	0.0089 J	ND(0.005)	0.155	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.161	0.0045
SD01-092010SW2	09/09/10	SW	ND(0.017)	0.0181	ND(0.0115)	0.0539	0.0138 J	ND(0.005)	0.0407	ND(0.0345)	0.00006 JB	ND(0.000056) UJ	0.0709	0.0171
SD01-NSUMP-SW	12/14/10	SW	ND(0.017)	0.0372	0.0262	0.0454 J	ND(0.0135)	ND(0.005)	0.0434 J	ND(0.0345) UJ	ND(0.00005) UJ	ND(0.00005) UJ	0.0968	0.0393 J
SD01-SSUMP-SW	12/14/10	SW	ND(0.017)	0.0309	0.0299	0.0138 J	ND(0.0135)	ND(0.005)	ND(0.0345) UJ	ND(0.0345) UJ	ND(0.00005) UJ	ND(0.00005) UJ	0.0552	0.0584
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.017)	0.0335	0.0307	ND(0.0135)	ND(0.0135)	ND(0.005)	ND(0.0345) UJ	ND(0.0345) UJ	ND(0.00005) UJ	ND(0.00005) UJ	0.0514	0.0456
SD08-052111SW	05/21/11	SW	--	0.121	--	0.228	--	ND(0.01)	0.116	--	0.00038 JB	--	0.368	--
SD01-TP-01	03/26/12	GW	0.0041 J	0.0543	0.0524	0.0085 J	0.0105	ND(0.005)	ND(0.011)	ND(0.011)	ND(0.000026) UJ	ND(0.000026) UJ	0.125	0.115
SD01-TP-02	03/26/12	GW	ND(0.0055)	0.0067 J	0.0102 J	ND(0.0047)	ND(0.0047)	ND(0.005)	ND(0.011)	ND(0.011)	ND(0.000026) UJ	ND(0.000026) UJ	0.0223	0.0261
SD01-TP-03	03/26/12	GW	ND(0.0055)	0.0078 J	0.0052 J	0.0152 J	0.0122 J	ND(0.005)	ND(0.011)	0.025 JB	ND(0.000026) UJ	ND(0.000026) UJ	0.0327	0.0345
SD01-TP-04	03/26/12	GW	0.0034 J	0.0035 J	0.0034 J	0.0049 J	0.0033 J	ND(0.005)	ND(0.0022)	ND(0.0022)	ND(0.000026) UJ	ND(0.000026) UJ	0.0065 J	0.0083 J
SD01-07042012-SW4	07/04/12	SW	--	0.0146	--	0.0814	--	ND(0.005)	ND(0.0051)	--	ND(0.000032) UJ	--	0.0743 J	--
SD01-07042012-SW5	07/04/12	SW	--	0.0435	--	0.0808	--	ND(0.005)	ND(0.0255)	--	ND(0.000032) UJ	--	0.141 J	--
SD01-07042012-SW5 Dup	07/04/12	SW	--	0.0481	--	0.0933	--	ND(0.005)	ND(0.0255)	--	ND(0.0000081) UJ	--	0.105 J	--
SD01-07042012-SW6	07/04/12	SW	--	0.0235 J	--	0.0139 J	--	ND(0.005)	ND(0.0255)	--	ND(0.000032) UJ	--	0.0617 J	--
SD01-SW04-121114	11/14/12	SW	--	ND(0.0033)	--	0.0771	--	--	ND(0.0255) UJ	--	ND(0.00007)	--	0.0452	--
SD01-SW05-121114	11/14/12	SW	--	0.0258	--	0.0561	--	--	ND(0.0255) UJ	--	ND(0.0007)	--	0.107	--
SD01-SW06-121114	11/14/12	SW	--	0.0094 J	--	ND(0.0105)	--	--	ND(0.0255) UJ	--	ND(0.0007)	--	0.0304	--
SD01-SW01-121115	11/15/12	SW	--	0.0696	--	ND(0.0105)	--	--	ND(0.0255)	--	ND(0.00007) UJ	--	0.138	--
SD01-SW02-121115	11/15/12	SW	--	0.0099 J	--	0.0107 J	--	--	ND(0.0255)	--	ND(0.00007) UJ	--	0.0392 J	--
SD01-SW03-121115	11/15/12	SW	--	0.0084 J	--	0.0239	--	--	ND(0.0255)	--	ND(0.00007) UJ	--	0.0408	--
SD01-TP-01	11/15/12	GW	--	0.0622	--	ND(0.0021)	--	--	ND(0.0051)	--	ND(0.00007) UJ	--	0.124	--
SD01-TP-02	11/15/12	GW	--	ND(0.0033)	--	ND(0.0105)	--	--	ND(0.0255)	--	ND(0.00007) UJ	--	0.0152 J	--
SD01-TP-02 Dup	11/15/12	GW	--	ND(0.0033)	--	ND(0.0105)	--	--	ND(0.0255)	--	ND(0.00007) UJ	--	0.0137 J	--
SD01-TP-03	11/15/12	GW	--	ND(0.0033)	--	0.0065 J	--	--	ND(0.0255)	--	ND(0.00007) UJ	--	0.0254 J	--
SD01-TP-04	11/15/12	GW	--	ND(0.00066)	--	ND(0.0021)	--	--	ND(0.0051)	--	ND(0.00007) UJ	--	0.0121 J	--
Surface Water Quality Standard or RBSL:			0.1	0.0047	0.0047	1.3	1.3	0.14	0.015	0.015	0.00005	0.00005	0.1	0.1
Surface Water Background (SD01):			NA	0.0494	NA	0.158	NA	NA	0.007	NA	0.0007	NA	0.156	NA
Groundwater Quality Standard or RBSL:			0.1	0.0047	0.0047	1.3	1.3	0.2	0.015	0.015	0.002	0.002	0.1	0.1

TABLE 5.1-1. ANALYTICAL RESULTS, INORGANIC CONSTITUENTS, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	Selenium, Total[1] (mg/L)	Selenium, Dissolved[1] (mg/L)	Silver, Total[1] (mg/L)	Silver, Dissolved[1] (mg/L)	Vanadium, Total[2] (mg/L)	Vanadium, Dissolved[2] (mg/L)	Zinc, Total[2] (mg/L)	Zinc, Dissolved[2] (mg/L)
DRAINAGE 01	02/12/10	SW	0.0969 R	--	ND(0.00008)	--	ND(0.0125)	--	ND(0.0405)	--
SD01-030310SW	03/03/10	SW	0.0139	--	ND(0.00008)	--	0.0044 J	--	0.0125 J	--
SD02-030310SW	03/03/10	SW	ND(0.00099)	--	ND(0.00008)	--	0.0071	--	0.0131 J	--
SD03-030310SW	03/03/10	SW	ND(0.00099)	--	ND(0.00008)	--	0.0026 J	--	ND(0.0081)	--
SD08-030310SW	03/03/10	SW	ND(0.00099)	--	ND(0.00008)	--	0.0088	--	0.031	--
SD01-031810-SW	03/18/10	SW	0.046	--	0.00071 J	--	0.227	--	0.716	--
SD01-042210-SW	04/22/10	SW	0.383 J	--	ND(0.0008)	--	0.0728	--	ND(0.081)	--
SD01-042310-SW	04/23/10	SW	0.0926 J	--	ND(0.0008)	--	0.0871	--	ND(0.081)	--
SD01-052110-SW1	05/21/10	SW	--	0.0506	--	ND(0.00008)	--	ND(0.025)	--	ND(0.0405)
SD01-052110-SW2	05/21/10	SW	--	ND(0.00099)	--	ND(0.00008)	--	ND(0.0125)	--	ND(0.0405)
SD01-061610SW1	06/16/10	SW	0.0744	0.0491	ND(0.0008)	ND(0.0008)	0.0243 J	0.0268	ND(0.0405)	ND(0.0405)
SD01-061610SW2	06/16/10	SW	0.0222	0.0207	ND(0.0004)	ND(0.0004)	0.0079	0.004 J	0.0083 J	ND(0.0081)
SD01-061610SW2 Dup	06/16/10	SW	0.0254	0.0237	ND(0.0004)	ND(0.0004)	0.0066	0.0037 J	ND(0.0081)	ND(0.0081)
SD07-061610SW	06/16/10	SW	0.001 J	0.0006 J	ND(0.00008)	ND(0.00008)	0.0295	0.0029 J	0.0729	0.0083 J
SD01-072010SW1	07/20/10	SW	0.0377 J	0.0532 J	ND(0.0008)	ND(0.0008)	0.0312	ND(0.0125) UJ	0.0684 J	ND(0.0405) UJ
SD01-072010SW1 Dup	07/20/10	SW	--	0.0061 J	--	ND(0.0004)	--	ND(0.0125)	--	ND(0.0405)
SD01-072010SW2	07/20/10	SW	0.0135 J	0.0141 J	ND(0.0004)	ND(0.0004)	ND(0.0125)	ND(0.0125) UJ	ND(0.0405)	ND(0.0405) UJ
SD01-072010SW2 Dup	07/20/10	SW	0.0081 J	0.0061 J	ND(0.0004)	ND(0.0004)	ND(0.0125)	ND(0.0125) UJ	ND(0.0405)	ND(0.0405) UJ
SD03-072010SW	07/20/10	SW	0.0012 J	0.00087 J	0.000094 J	ND(0.00008)	0.0403	ND(0.0025) UJ	0.0647	0.0164 J
SD01-NSUMP-SW	08/10/10	SW	0.0494	0.0371	0.00045 J	ND(0.0004)	0.237	ND(0.0125)	0.646	ND(0.0405)
SD01-SSUMP-SW	08/10/10	SW	0.0203	0.0188	ND(0.0004)	ND(0.0004)	0.103	ND(0.025)	0.307	ND(0.081)
SD01-092010SW1	09/09/10	SW	0.0306 J	0.0122 J	0.0011	ND(0.00008)	0.352	0.0037 J	0.844	ND(0.0081)
SD01-092010SW2	09/09/10	SW	0.026	0.0193	0.00028 J	ND(0.00008)	0.0936	ND(0.0125)	0.224	ND(0.0405)
SD01-NSUMP-SW	12/14/10	SW	0.0355 J	0.0288 J	ND(0.0016)	ND(0.0016)	0.0849	ND(0.0125)	0.212	ND(0.0405)
SD01-SSUMP-SW	12/14/10	SW	0.0694 J	0.0689 J	ND(0.0016)	ND(0.0016)	ND(0.0125)	ND(0.0125)	0.041 J	ND(0.0405)
SD01-SSUMP-SW Dup	12/14/10	SW	0.0689 J	0.0661 J	ND(0.0016)	ND(0.0016)	ND(0.0125)	ND(0.0125)	0.0438 J	ND(0.0405)
SD08-052111SW	05/21/11	SW	0.0075	--	0.001	--	0.684	--	1.39	--
SD01-TP-01	03/26/12	GW	0.226	0.238	ND(0.00049)	ND(0.00049)	ND(0.00096)	ND(0.0048)	1.51	1.44
SD01-TP-02	03/26/12	GW	0.521	0.473	ND(0.00049)	ND(0.00049)	ND(0.0048)	ND(0.0048)	0.151	0.131
SD01-TP-03	03/26/12	GW	0.107	0.118	ND(0.00049)	ND(0.00049)	ND(0.0048)	ND(0.0048)	0.653	0.655
SD01-TP-04	03/26/12	GW	0.0032 J	0.003 J	ND(0.00049)	ND(0.00049)	ND(0.00096)	ND(0.00096)	0.132	0.118
SD01-07042012-SW4	07/04/12	SW	0.0104 J	--	ND(0.0001) UJ	--	0.0241	--	0.0184 J	--
SD01-07042012-SW5	07/04/12	SW	0.0432 J	--	ND(0.0005) UJ	--	0.034	--	0.0653 J	--
SD01-07042012-SW5 Dup	07/04/12	SW	0.0417 J	--	ND(0.0005) UJ	--	0.0392	--	0.0856 J	--
SD01-07042012-SW6	07/04/12	SW	0.19 J	--	ND(0.0005) UJ	--	ND(0.0065)	--	0.027 J	--
SD01-SW04-121114	11/14/12	SW	0.0076 J	--	ND(0.001)	--	ND(0.0065)	--	0.0605 J	--
SD01-SW05-121114	11/14/12	SW	0.123	--	ND(0.001)	--	0.0434	--	0.533	--
SD01-SW06-121114	11/14/12	SW	0.121	--	ND(0.001)	--	ND(0.0065)	--	0.0181 J	--
SD01-SW01-121115	11/15/12	SW	0.151 J	--	ND(0.001)	--	ND(0.0065)	--	0.0656 J	--
SD01-SW02-121115	11/15/12	SW	0.0937 J	--	ND(0.001)	--	ND(0.0065)	--	0.0205 J	--
SD01-SW03-121115	11/15/12	SW	0.0764 J	--	ND(0.001)	--	0.0146 J	--	0.0409 J	--
SD01-TP-01	11/15/12	GW	0.213 J	--	ND(0.001)	--	ND(0.0013)	--	0.0923	--
SD01-TP-02	11/15/12	GW	0.321 J	--	ND(0.001)	--	ND(0.0065)	--	0.0178 J	--
SD01-TP-02 Dup	11/15/12	GW	0.409 J	--	ND(0.001)	--	ND(0.0065)	--	0.018 J	--
SD01-TP-03	11/15/12	GW	0.0413 J	--	ND(0.001)	--	ND(0.0013)	--	0.0237 J	--
SD01-TP-04	11/15/12	GW	ND(0.005)	--	ND(0.001)	--	ND(0.0013)	--	0.0169 J	--
Surface Water Quality Standard or RBSL:			0.05	0.05	0.1	0.1	0.078	0.078	2	2
Surface Water Background (SD01):			0.0228	NA	0.001	NA	0.0554	NA	0.169	NA
Groundwater Quality Standard or RBSL:			0.05	0.05	0.1	0.1	0.078	0.078	2	2

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
JB - Estimated concentration due to blank contamination
UJ - Estimated reporting limit
R - Rejected, data not useable
RBSL - Risk Based Screening Level
SW - Surface Water (surface water standard applies)
GW - Groundwater (groundwater standard applies)

TABLE 5.1-2. ANALYTICAL RESULTS, VOCs, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)
DRAINAGE 01	02/12/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.01) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.004) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-030310SW	03/03/10	SW	0.0006 J	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD02-030310SW	03/03/10	SW	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD03-030310SW	03/03/10	SW	ND(0.0001)	ND(0.0001)	ND(0.001) R	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD08-030310SW	03/03/10	SW	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-031810-SW	03/18/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.01) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.004) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-042210-SW	04/22/10	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-042310-SW	04/23/10	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-052110-SW1	05/21/10	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-052110-SW2	05/21/10	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-061610SW1	06/16/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-061610SW2	06/16/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-061610SW2 Dup	06/16/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD07-061610SW	06/16/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072010SW1	07/20/10	SW	0.001 J	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072010SW2	07/20/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072010SW2 Dup	07/20/10	SW	0.0011 J	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD03-072010SW	07/20/10	SW	0.001 J	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-NSUMP-SW	08/10/10	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SSUMP-SW	08/10/10	SW	ND(0.005)	ND(0.005)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-092010SW1	09/09/10	SW	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-092010SW2	09/09/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-NSUMP-SW	12/14/10	SW	ND(0.002)	ND(0.002) UJ	ND(0.02)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.008)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
SD01-SSUMP-SW	12/14/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD08-052111SW	05/21/11	SW	ND(0.0001)	ND(0.0001)	0.0012 J	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-TP-01	03/26/12	GW	1.3 J	ND(0.001) UJ	ND(0.01) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.004) UJ	ND(0.001) UJ	ND(0.001) UJ	0.018 J	ND(0.001) UJ	ND(0.001) UJ	0.012 J	ND(0.001) UJ
SD01-TP-02	03/26/12	GW	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.002) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ
SD01-TP-03	03/26/12	GW	0.066 J	ND(0.001) UJ	ND(0.01) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.004) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-TP-04	03/26/12	GW	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.002) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ
SD01-TP-01	04/26/12	GW	0.98	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.011	ND(0.001)	ND(0.001)	0.013	ND(0.001)
SD01-TP-03	04/26/12	GW	0.0016 J	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	0.0003 J	ND(0.0001)
SD01-05032012SW1	05/03/12	SW	0.062	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0035	ND(0.0005)	ND(0.0005)	0.002 J	ND(0.0005)
SD01-05032012SW2	05/03/12	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-05032012SW3	05/03/12	SW	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	05/03/12	GW	0.9	ND(0.005)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	0.012 J	ND(0.005)	ND(0.005)	0.013 J	ND(0.005)
SD01-TP-02	05/03/12	GW	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-03	05/03/12	GW	0.0017 J	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-04	05/03/12	GW	ND(0.0005)	ND(0.0005) UJ	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-06062012SW1	06/06/12	SW	0.091	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0019 J	ND(0.0005)
SD01-06062012SW1 Dup	06/06/12	SW	0.074	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0015 J	ND(0.0005)
SD01-06062012SW2	06/06/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-06062012SW3	06/06/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	07/02/12	GW	0.062	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.003 J	ND(0.001)	ND(0.001)	0.0052	ND(0.001)
SD01-TP-01 Dup	07/02/12	GW	0.069	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0032 J	ND(0.001)	ND(0.001)	0.0054	ND(0.001)
SD01-TP-02	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	07/02/12	GW	0.011	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-04	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-07042012-SW1	07/04/12	SW	0.011	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-07042012-SW2	07/04/12	SW	ND(0.005)	ND(0.005)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-07042012-SW3	07/04/12	SW	ND(0.005)	ND(0.005)	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.02)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-072712-SW01	07/27/12	SW	0.47	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	0.0066	ND(0.0005)	ND(0.0005)	0.0049	ND(0.0005)
SD01-072712-SW02	07/27/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072712-SW03	07/27/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-091312-SW1	09/13/12	SW	0.008	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0027 J	ND(0.001)	ND(0.001)	0.0012 J	ND(0.001)
SD01-091312-SW2	09/13/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	09/13/12	GW	0.01	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0078	ND(0.001)	ND(0.001)	0.0065	ND(0.001)
SD01-TP-02	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-02 Dup	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	09/13/12	GW	0.0033 J	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-04	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SW01-121115	11/15/12	SW	0.27	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.0078	ND(0.001)	ND(0.001)	0.0036 J	ND(0.001)
SD01-SW02-121115	11/15/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SW03-121115	11/15/12	SW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	11/15/12	GW	0.061	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	0.017	ND(0.001)	ND(0.001)	0.01	ND(0.001)
SD01-TP-02	11/15/12	GW	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-02 Dup	11/15/12	GW	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	11/15/12	GW	0.0007 J	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-04	11/15/12	GW	ND(0.0005)	ND(0.0005)	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Water Quality Standards for Surface Water (mg/L):			0.005	0.000016	4.9	0.78	NA	NA	0.72	0.1	0.057	13	0.000004	0.0024	0.0038	0.53
Groundwater Standard or RBSL (mg/L):			0.005	0.000016	4.9	0.78	NA	NA	0.72	0.1	0.07	13	0.000004	0.0024	0.004	0.7

TABLE 5.1-2. ANALYTICAL RESULTS, VOCs, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (MTBE) (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
DRAINAGE 01	02/12/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-030310SW	03/03/10	SW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD02-030310SW	03/03/10	SW	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD03-030310SW	03/03/10	SW	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD08-030310SW	03/03/10	SW	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-031810-SW	03/18/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-042210-SW	04/22/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-042310-SW	04/23/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-052110-SW1	05/21/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-052110-SW2	05/21/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-061610SW1	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-061610SW2	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-061610SW2 Dup	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD07-061610SW	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072010SW1	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072010SW2	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0012 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072010SW2 Dup	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0015 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD03-072010SW	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0034 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-NSUMP-SW	08/10/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SSUMP-SW	08/10/10	SW	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-092010SW1	09/09/10	SW	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-092010SW2	09/09/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-NSUMP-SW	12/14/10	SW	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.002 J	ND(0.002)	0.0024 J
SD01-SSUMP-SW	12/14/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0014 J	ND(0.001)	0.0014 J
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD08-052111SW	05/21/11	SW	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-TP-01	03/26/12	GW	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	0.0077 J	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-TP-02	03/26/12	GW	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ
SD01-TP-03	03/26/12	GW	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ
SD01-TP-04	03/26/12	GW	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ	ND(0.0005) UJ
SD01-TP-01	04/26/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0058	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	04/26/12	GW	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SD01-05032012SW1	05/03/12	SW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0007 J	ND(0.0005)	ND(0.0005)	0.0008 J	ND(0.0005)	0.0011 J	ND(0.0005)	0.0011 J
SD01-05032012SW2	05/03/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-05032012SW3	05/03/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	05/03/12	GW	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.006 J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-TP-02	05/03/12	GW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-03	05/03/12	GW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-04	05/03/12	GW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-06062012SW1	06/06/12	SW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0008 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-06062012SW1 Dup	06/06/12	SW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0006 J	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-06062012SW2	06/06/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-06062012SW3	06/06/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0012 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01 Dup	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0012 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-02	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-04	07/02/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-07042012-SW1	07/04/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-07042012-SW2	07/04/12	SW	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-07042012-SW3	07/04/12	SW	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SD01-072712-SW01	07/27/12	SW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0041	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0008 J	0.0008 J
SD01-072712-SW02	07/27/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-072712-SW03	07/27/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-091312-SW1	09/13/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-091312-SW2	09/13/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0013 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-02	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-02 Dup	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-04	09/13/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SW01-121115	11/15/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0027 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SW02-121115	11/15/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-SW03-121115	11/15/12	SW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-01	11/15/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.0023 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-02	11/15/12	GW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-02 Dup	11/15/12	GW	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
SD01-TP-03	11/15/12	GW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
SD01-TP-04	11/15/12	GW	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Water Quality Standards for Surface Water (mg/L):			0.25	0.39	0.03	NA	0.1	0.005	1	0.2	0.005	0.015	0.087	10	10	10
Groundwater Standard or RBSL (mg/L):			0.25	0.39	0.03	NA	0.1	0.005	1	0.2	0.005	0.015	0.087	10	10	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated reporting limit
R - Rejected, data not usable
RBSL - Risk Based Screening Level
NA - Groundwater/Surface water standard or RBSL does not exist
SW - Surface Water (surface water standard applies)
GW - Groundwater (groundwater standard applies)

TABLE 5.1-3. ANALYTICAL RESULTS, SVOCs, SURFACE WATER
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	Benzenethiol (Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)
DRAINAGE 01	02/12/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-030310SW	03/03/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)
SD02-030310SW	03/03/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.001)	ND(0.002)	ND(0.001)
SD03-030310SW	03/03/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.002)	ND(0.001)
SD08-030310SW	03/03/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-031810-SW	03/18/10	SW	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.000011) UJ	ND(0.000011) UJ	ND(0.000011) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-042210-SW	04/22/10	SW	ND(0.001) UJ	ND(0.001) UJ	ND(0.006) UJ	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001) UJ	ND(0.002) UJ	ND(0.001) UJ
SD01-042310-SW	04/23/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.002)	ND(0.001)
SD01-052110-SW1	05/21/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)
SD01-052110-SW2	05/21/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	0.000018 J	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)
SD01-061610SW1	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	0.05	ND(0.001)
SD01-061610SW2	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)
SD01-061610SW2 Dup	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.005) UJ	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD07-061610SW	06/16/10	SW	ND(0.001)	ND(0.001)	ND(0.005) UJ	0.00001 J	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-072010SW1	07/20/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.005) R	0.00001 J	0.000012 J	0.000013 J	ND(0.001) UJ	ND(0.002) UJ	ND(0.001) UJ
SD01-072010SW2	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-072010SW2 Dup	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001) UJ	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD03-072010SW	07/20/10	SW	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00005) UJ	ND(0.00005)	ND(0.00005) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-NSUMP-SW	08/10/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000099)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.002)	ND(0.001)
SD01-SSUMP-SW	08/10/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-092010SW1	09/09/10	SW	ND(0.0009)	ND(0.0009)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0009)	ND(0.002) UJ	ND(0.0009) UJ
SD01-092010SW2	09/09/10	SW	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)	0.003 J	ND(0.001)
SD01-NSUMP-SW	12/14/10	SW	ND(0.001)	ND(0.001) UJ	ND(0.005) R	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.0000098) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.001) UJ
SD01-SSUMP-SW	12/14/10	SW	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.001)	ND(0.001)	ND(0.005) R	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SD08-052111SW	05/21/11	SW	ND(0.01) UJ	ND(0.01)	ND(0.05)	0.000018 J	0.00001 J	0.000059 J	ND(0.01)	ND(0.02)	ND(0.01)
SD01-TP-01	03/26/12	GW	ND(0.0001)	ND(0.0000095) [2]	ND(0.005) UJ	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)
SD01-TP-02	03/26/12	GW	ND(0.0001)	ND(0.0000095) [2]	ND(0.005) UJ	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)
SD01-TP-03	03/26/12	GW	ND(0.0001)	0.000013 J [2]	ND(0.005) UJ	ND(0.0000098)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.002)	ND(0.0001)
SD01-TP-04	03/26/12	GW	ND(0.00009)	0.00001 J [2]	ND(0.005) UJ	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.00009)	ND(0.002)	ND(0.00009)
SD01-07042012-SW4	07/04/12	SW	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.002)	ND(0.0001)
SD01-07042012-SW5	07/04/12	SW	ND(0.0001) UJ	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)
SD01-07042012-SW5 Dup	07/04/12	SW	ND(0.0001) UJ	ND(0.0001)	ND(0.005)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)
SD01-07042012-SW6	07/04/12	SW	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095) UJ	ND(0.0000095) UJ	ND(0.0000095) UJ	ND(0.0001)	ND(0.002)	ND(0.0001)
SD-01-SW04-121114	11/14/12	SW	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000096)	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)
SD-01-SW05-121114	11/14/12	SW	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000096) UJ	ND(0.0000096)	ND(0.0000096)	ND(0.0001)	ND(0.002)	ND(0.0001)
SD-01-SW06-121114	11/14/12	SW	ND(0.0001)	ND(0.0001)	ND(0.005)	ND(0.0000095)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.002)	ND(0.0001)
Water Quality Standards for Surface Water (mg/L):			0.67	8.3	0.013	0.000038	0.000038	0.000038	0.000038	0.006	0.000038
Groundwater Standard or RBSL (mg/L):			0.67	2.1	0.013	0.0005	0.00005	0.0005	0.005	0.006	0.05

TABLE 5.1-3. ANALYTICAL RESULTS, SVOCs, SURFACE WATER
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)	Dimethylphthalate[1] (mg/L)	Di-n-butylphthalate[1] (mg/L)
DRAINAGE 01	02/12/10	SW	ND(0.001)	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	0.002 J
SD01-030310SW	03/03/10	SW	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD02-030310SW	03/03/10	SW	ND(0.001)	ND(0.0000096)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD03-030310SW	03/03/10	SW	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD08-030310SW	03/03/10	SW	ND(0.001)	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-031810-SW	03/18/10	SW	ND(0.001)	ND(0.000011) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-042210-SW	04/22/10	SW	ND(0.001) UJ	ND(0.0001)	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.003) UJ	ND(0.002) UJ	ND(0.002) UJ
SD01-042310-SW	04/23/10	SW	ND(0.001)	ND(0.0001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-052110-SW1	05/21/10	SW	ND(0.001) UJ	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-052110-SW2	05/21/10	SW	ND(0.001) UJ	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-061610SW1	06/16/10	SW	ND(0.001)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-061610SW2	06/16/10	SW	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-061610SW2 Dup	06/16/10	SW	ND(0.001)	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD07-061610SW	06/16/10	SW	ND(0.001)	0.000014 J	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-072010SW1	07/20/10	SW	ND(0.001) UJ	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002) UJ
SD01-072010SW2	07/20/10	SW	ND(0.001)	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-072010SW2 Dup	07/20/10	SW	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD03-072010SW	07/20/10	SW	ND(0.001)	ND(0.00005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-NSUMP-SW	08/10/10	SW	ND(0.001)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-SSUMP-SW	08/10/10	SW	ND(0.001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-092010SW1	09/09/10	SW	ND(0.0009)	ND(0.0000096)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-092010SW2	09/09/10	SW	ND(0.001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-NSUMP-SW	12/14/10	SW	ND(0.001) UJ	ND(0.0000098) UJ	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002) UJ
SD01-SSUMP-SW	12/14/10	SW	ND(0.001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.001)	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.001) UJ	ND(0.002)	ND(0.003)	ND(0.002)	ND(0.002)
SD08-052111SW	05/21/11	SW	ND(0.01)	ND(0.0000099) UJ	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02) UJ	ND(0.03)	ND(0.02) UJ	ND(0.02)
SD01-TP-01	03/26/12	GW	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002) UJ	ND(0.002)
SD01-TP-02	03/26/12	GW	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002) UJ	ND(0.002)
SD01-TP-03	03/26/12	GW	ND(0.001)	ND(0.0000098)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002) UJ	ND(0.002)
SD01-TP-04	03/26/12	GW	ND(0.0009)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002) UJ	ND(0.002)
SD01-07042012-SW4	07/04/12	SW	ND(0.001)	ND(0.00001)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002)	ND(0.002)
SD01-07042012-SW5	07/04/12	SW	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)	ND(0.002) UJ	ND(0.002)
SD01-07042012-SW5 Dup	07/04/12	SW	ND(0.001)	ND(0.00001) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002) UJ	ND(0.0005)	ND(0.002) UJ	ND(0.002)
SD01-07042012-SW6	07/04/12	SW	ND(0.001)	ND(0.0000095) UJ	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002)	ND(0.002)
SD-01-SW04-121114	11/14/12	SW	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002)	ND(0.002)
SD-01-SW05-121114	11/14/12	SW	ND(0.001)	ND(0.0000096)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002)	ND(0.002)
SD-01-SW06-121114	11/14/12	SW	ND(0.001)	ND(0.0000095)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.002)	ND(0.0005)	ND(0.002)	ND(0.002)
Water Quality Standards for Surface Water (mg/L):			NA	0.000038	0.42	0.32	0.075	17	0.38	270	2
Groundwater Standard or RBSL (mg/L):			NA	0.00005	0.6	0.6	0.075	17	0.38	270	2

TABLE 5.1-3. ANALYTICAL RESULTS, SVOCs, SURFACE WATER
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Location ID	Date Sampled	Location Type	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)
DRAINAGE 01	02/12/10	SW	ND(0.019)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD01-030310SW	03/03/10	SW	ND(0.021)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	0.00001 J	ND(0.001)	ND(0.001)	ND(0.002)
SD02-030310SW	03/03/10	SW	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096)	0.000026 J	ND(0.001)	ND(0.001)	ND(0.002)
SD03-030310SW	03/03/10	SW	ND(0.02)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)
SD08-030310SW	03/03/10	SW	ND(0.019)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD01-031810-SW	03/18/10	SW	ND(0.023)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011) UJ	0.000013 J	ND(0.001)	ND(0.001)	ND(0.002)
SD01-042210-SW	04/22/10	SW	ND(0.023) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.0001)	ND(0.0001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ
SD01-042310-SW	04/23/10	SW	ND(0.022)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.001)	ND(0.002)
SD01-052110-SW1	05/21/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	ND(0.0000099)	ND(0.001)	ND(0.001)	ND(0.002)
SD01-052110-SW2	05/21/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.001)	0.005 J
SD01-061610SW1	06/16/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.001)	ND(0.001)	ND(0.002)
SD01-061610SW2	06/16/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.002)
SD01-061610SW2 Dup	06/16/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000096) UJ	ND(0.0000096) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD07-061610SW	06/16/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD01-072010SW1	07/20/10	SW	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.00001) UJ	0.000012 J	ND(0.001)	ND(0.001)	ND(0.002)
SD01-072010SW2	07/20/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD01-072010SW2 Dup	07/20/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	0.000011 J	ND(0.001)	ND(0.001)	ND(0.002)
SD03-072010SW	07/20/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00005)	ND(0.00005) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD01-NSUMP-SW	08/10/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000099)	0.000022 J	ND(0.001)	ND(0.001)	ND(0.002)
SD01-SSUMP-SW	08/10/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)
SD01-092010SW1	09/09/10	SW	ND(0.009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0000096)	ND(0.0000096)	ND(0.0009)	ND(0.0009)	ND(0.002)
SD01-092010SW2	09/09/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.002)
SD01-NSUMP-SW	12/14/10	SW	ND(0.01)	ND(0.001)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.0000098) UJ	0.000064	ND(0.001)	ND(0.001)	ND(0.002)
SD01-SSUMP-SW	12/14/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097) UJ	ND(0.0000097) UJ	ND(0.001)	ND(0.001)	ND(0.002)
SD08-052111SW	05/21/11	SW	ND(0.1) UJ	ND(0.01)	ND(0.01)	ND(0.01) UJ	ND(0.01)	0.000012 J	0.00011 J	ND(0.01) UJ	ND(0.01)	ND(0.02)
SD01-TP-01	03/26/12	GW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095)	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD01-TP-02	03/26/12	GW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	0.000011 J	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD01-TP-03	03/26/12	GW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000098)	ND(0.0000098)	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD01-TP-04	03/26/12	GW	ND(0.009)	ND(0.0009)	ND(0.00009)	ND(0.00009)	ND(0.0009)	ND(0.0000095)	ND(0.0000095)	ND(0.00009)	ND(0.0005)	ND(0.0005)
SD01-07042012-SW4	07/04/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD01-07042012-SW5	07/04/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.00001) UJ	ND(0.00001)	ND(0.0001) UJ	ND(0.0005)	ND(0.0005)
SD01-07042012-SW5 Dup	07/04/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001) UJ	ND(0.001)	ND(0.00001) UJ	ND(0.00001)	ND(0.0001) UJ	ND(0.0005)	ND(0.0005)
SD01-07042012-SW6	07/04/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095) UJ	ND(0.0000095) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD-01-SW04-121114	11/14/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD-01-SW05-121114	11/14/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000096)	ND(0.0000096) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)
SD-01-SW06-121114	11/14/12	SW	ND(0.01)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.001)	ND(0.0000095)	ND(0.0000095) UJ	ND(0.0001)	ND(0.0005)	ND(0.0005)
Water Quality Standards for Surface Water (mg/L):			0.069	0.00067	0.13	1.1	NA	0.000038	0.00097	0.027	0.72	1.4
Groundwater Standard or RBSL (mg/L):			0.069	0.00067	0.13	1.1	NA	0.0005	0.00097	0.027	0.72	1.4

TABLE 5.1-3. ANALYTICAL RESULTS, SVOCs, SURFACE WATER
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Location ID	Date Sampled	Location Type	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Quinoline[1] (mg/L)
DRAINAGE 01	02/12/10	SW	0.000011 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD01-030310SW	03/03/10	SW	0.000019 JB	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD02-030310SW	03/03/10	SW	0.000029 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD03-030310SW	03/03/10	SW	0.000014 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD08-030310SW	03/03/10	SW	ND(0.0000096) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD01-031810-SW	03/18/10	SW	0.000032 J	ND(0.012)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.02)	ND(0.001)
SD01-042210-SW	04/22/10	SW	ND(0.0001)	ND(0.011) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.001) UJ	ND(0.002) UJ	ND(0.04) UJ	ND(0.001) UJ
SD01-042310-SW	04/23/10	SW	ND(0.0001)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-052110-SW1	05/21/10	SW	0.000069	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.04)	ND(0.001)
SD01-052110-SW2	05/21/10	SW	0.000031 J	ND(0.01)	ND(0.001)	0.009	ND(0.001)	ND(0.002)	ND(0.004)	ND(0.001)
SD01-061610SW1	06/16/10	SW	ND(0.0000095) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-061610SW2	06/16/10	SW	0.00001 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-061610SW2 Dup	06/16/10	SW	0.000099 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD07-061610SW	06/16/10	SW	0.000017 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-072010SW1	07/20/10	SW	ND(0.00001)	ND(0.01) UJ	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002)	ND(0.02) UJ	ND(0.001)
SD01-072010SW2	07/20/10	SW	ND(0.0000097)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-072010SW2 Dup	07/20/10	SW	0.000014 J	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD03-072010SW	07/20/10	SW	ND(0.00005)	ND(0.01) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.01) UJ	ND(0.001)
SD01-NSUMP-SW	08/10/10	SW	ND(0.0000099)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD01-SSUMP-SW	08/10/10	SW	0.000017 J	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD01-092010SW1	09/09/10	SW	0.000018 J	ND(0.009)	ND(0.0009)	ND(0.0009)	ND(0.0009) UJ	ND(0.002)	ND(0.002)	ND(0.0009)
SD01-092010SW2	09/09/10	SW	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SD01-NSUMP-SW	12/14/10	SW	ND(0.0000098)	ND(0.01)	ND(0.001) UJ	ND(0.001)	ND(0.001) UJ	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-SSUMP-SW	12/14/10	SW	ND(0.00001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD01-SSUMP-SW Dup	12/14/10	SW	ND(0.0000097) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002) UJ	ND(0.001)
SD08-052111SW	05/21/11	SW	0.000093	ND(0.1) UJ	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.02)	ND(0.002)	ND(0.01) UJ
SD01-TP-01	03/26/12	GW	0.00013	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0000095) [2]	ND(0.002)	ND(0.002)	ND(0.001)
SD01-TP-02	03/26/12	GW	0.00017	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0000095) [2]	ND(0.002)	ND(0.002)	ND(0.001)
SD01-TP-03	03/26/12	GW	0.000052	ND(0.01)	ND(0.0001)	0.0009 J	ND(0.0000098) [2]	ND(0.002)	ND(0.002)	ND(0.001)
SD01-TP-04	03/26/12	GW	0.000061	ND(0.009)	ND(0.00009)	ND(0.0005)	ND(0.0000095) [2]	ND(0.002)	ND(0.002)	ND(0.0009)
SD01-07042012-SW4	07/04/12	SW	0.000061	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001)
SD01-07042012-SW5	07/04/12	SW	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001) UJ
SD01-07042012-SW5 Dup	07/04/12	SW	ND(0.000031)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001) UJ
SD01-07042012-SW6	07/04/12	SW	ND(0.000029) UJ	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001)
SD-01-SW04-121114	11/14/12	SW	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001)
SD-01-SW05-121114	11/14/12	SW	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001)
SD-01-SW06-121114	11/14/12	SW	ND(0.000029)	ND(0.01)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.002)	--	ND(0.001)
Water Quality Standards for Surface Water (mg/L):			0.1	0.06	NA	0.3	0.83	0.015	0.00000099	0.000021
Groundwater Standard or RBSL (mg/L):			0.1	0.06	NA	0.3	0.83	0.015	0.00000099	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated reporting limit
R - Rejected, data not useable
JB - Estimated concentration due to blank contamination
RBSL - Risk Based Screening Level
NA - Groundwater/Surface water standard or RBSL does not exist
SW - Surface Water (surface water standard applies)
GW - Groundwater (groundwater standard applies)

TABLE 5.1-4. ANALYTICAL RESULTS, EPH/VPH, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Location Type	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
DRAINAGE 01	02/12/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-030310SW	03/03/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD02-030310SW	03/03/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD03-030310SW	03/03/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD08-030310SW	03/03/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-031810-SW	03/18/10	SW	0.059	ND(0.042)	0.33	0.39	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	ND(0.05) UJ
SD01-042210-SW	04/22/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-042310-SW	04/23/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-052110-SW1	05/21/10	SW	ND(0.3) UJ	ND(0.4)	ND(0.5)	ND(0.3) UJ	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	ND(0.05)
SD01-052110-SW2	05/21/10	SW	ND(0.031) UJ	0.77	0.43 J	1.2 J	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	ND(0.05)
SD01-061610SW1	06/16/10	SW	ND(0.03) UJ	0.5 J	0.22 J	0.72 J	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-061610SW2	06/16/10	SW	ND(0.03) UJ	ND(0.039) UJ	0.083 J	0.083 J	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-061610SW2 Dup	06/16/10	SW	ND(0.029) R	0.041 J	ND(0.049) R	0.041 J	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD07-061610SW	06/16/10	SW	ND(0.029) UJ	0.047 J	0.73 J	0.77 J	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-072010SW1	07/20/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-072010SW2	07/20/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-072010SW2 Dup	07/20/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD03-072010SW	07/20/10	SW	ND(0.03) UJ	0.15	0.14 J	0.29 J	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-NSUMP-SW	08/10/10	SW	ND(0.3) UJ	ND(0.4) UJ	ND(0.5) UJ	ND(0.3) UJ	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	ND(0.05) UJ
SD01-SSUMP-SW	08/10/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-092010SW1	09/09/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-092010SW2	09/09/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-NSUMP-SW	12/14/10	SW	ND(0.029)	ND(0.039)	ND(0.049)	ND(0.029)	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-SSUMP-SW	12/14/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-SSUMP-SW Dup	12/14/10	SW	--	--	--	ND(0.5) UJ [3]	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD08-052111SW	05/21/11	SW	ND(0.3) UJ	ND(0.4)	ND(0.5) UJ	ND(0.3) UJ	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-01	03/26/12	GW	ND(0.029)	ND(0.038)	ND(0.048)	ND(0.029)	1.44 J	ND(0.02) UJ	0.0253 J	2.34 J
SD01-TP-02	03/26/12	GW	--	--	--	ND(0.5) [3]	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	ND(0.05) UJ
SD01-TP-03	03/26/12	GW	--	--	--	ND(0.5) [3]	ND(0.25) UJ	ND(0.1) UJ	ND(0.1) UJ	ND(0.25) UJ
SD01-TP-04	03/26/12	GW	--	--	--	ND(0.5) [3]	ND(0.05) UJ	ND(0.02) UJ	ND(0.02) UJ	ND(0.05) UJ
SD01-TP-01	04/26/12	GW	--	--	--	--	0.98	ND(0.02)	0.0232 J	1.83
SD01-TP-03	04/26/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-05032012SW1	05/03/12	SW	--	--	--	--	0.263	ND(0.02)	ND(0.02)	0.339
SD01-05032012SW2	05/03/12	SW	--	--	--	--	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-05032012SW3	05/03/12	SW	--	--	--	--	ND(1)	ND(0.4)	ND(0.4)	ND(1)
SD01-TP-01	05/03/12	GW	--	--	--	--	0.912	ND(0.02)	0.0328 J	1.6
SD01-TP-02	05/03/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-03	05/03/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-04	05/03/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-06062012SW1	06/06/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-06062012SW1 Dup	06/06/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-06062012SW2	06/06/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-06062012SW3	06/06/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-TP-01	07/02/12	GW	--	--	--	--	0.433 J	ND(0.02)	ND(0.02)	0.514
SD01-TP-01 Dup	07/02/12	GW	--	--	--	--	0.354 J	ND(0.02)	ND(0.02)	0.429
SD01-TP-02	07/02/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-03	07/02/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-04	07/02/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-07042012-SW1	07/04/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-07042012-SW2	07/04/12	SW	--	--	--	--	ND(2.5)	ND(1)	ND(1)	ND(2.5)
SD01-07042012-SW3	07/04/12	SW	--	--	--	--	ND(2.5)	ND(1)	ND(1)	ND(2.5)
SD01-072712-SW01	07/27/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	0.989 J
SD01-072712-SW02	07/27/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-072712-SW03	07/27/12	SW	--	--	--	--	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.5)
SD01-091312-SW1	09/13/12	SW	--	--	--	--	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-091312-SW2	09/13/12	SW	--	--	--	--	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-TP-01	09/13/12	GW	--	--	--	--	0.51	ND(0.02)	ND(0.02)	0.54
SD01-TP-02	09/13/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-02 Dup	09/13/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-03	09/13/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-04	09/13/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-SW01-121115	11/15/12	SW	--	--	--	--	0.467 J	ND(0.1)	ND(0.1)	0.708
SD01-SW02-121115	11/15/12	SW	--	--	--	--	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-SW03-121115	11/15/12	SW	--	--	--	--	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-TP-01	11/15/12	GW	--	--	--	--	0.93	ND(0.02)	0.0234 J	1.02
SD01-TP-02	11/15/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-02 Dup	11/15/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
SD01-TP-03	11/15/12	GW	--	--	--	--	ND(0.25)	ND(0.1)	ND(0.1)	ND(0.25)
SD01-TP-04	11/15/12	GW	--	--	--	--	ND(0.05)	ND(0.02)	ND(0.02)	ND(0.05)
Water Quality Standards for Surface Water (mg/L):			NA	NA	NA	NA	NA	NA	NA	NA
Groundwater Standard or RBSL (mg/L):			1	0.7	1	1	1	1	1	1

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
[3] - Result from laboratory analytical method MT EPH Screen
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated reporting limit
R - Rejected, data not useable
RBSL - Risk Based Screening Level
NA - Groundwater/Surface water standard or RBSL does not exist
SW - Surface Water (surface water standard applies)
GW - Groundwater (groundwater standard applies)

TABLE 5.1-5A. DATA SUMMARY, INORGANIC CONSTITUENTS, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Water Quality Standard Exceedances	Surface Water Quality Standards (mg/L)
Antimony, Total[1]	34	15	44.12%	0.0148 J	SD01-042210-SW	4	0.0056
Antimony, Dissolved[1]	18	7	38.89%	0.0019 J	Multiple Locations	0	0.0056
Arsenic, Total[1]	34	32	94.12%	0.111 J	SD01-042210-SW	23	0.01
Arsenic, Dissolved[1]	18	13	72.22%	0.0251 J	SD01-072010SW1	5	0.01
Barium, Total[2]	34	34	100.00%	2.63	SD08-052111SW	2	1
Barium, Dissolved[2]	18	18	100.00%	0.0734	SD07-061610SW	0	1
Beryllium, Total[1]	34	9	26.47%	0.0106	SD08-052111SW	4	0.004
Beryllium, Dissolved[1]	18	0	0.00%	--	--	0	0.004
Cadmium, Total[2]	34	3	8.82%	0.0103	SD01-092010SW1	2	0.005
Cadmium, Dissolved[2]	18	0	0.00%	--	--	0	0.005
Chromium, Total[2]	34	22	64.71%	0.287	SD08-052111SW	3	0.1
Chromium, Dissolved[2]	18	1	5.56%	0.0188 J	SD01-052110-SW1	0	0.1
Cobalt, Total[2]	34	26	76.47%	0.121	SD08-052111SW	23	0.0047
Cobalt, Dissolved[2]	18	13	72.22%	0.0359 J	SD01-SSUMP-SW	10	0.0047
Copper, Total[2]	34	28	82.35%	0.228	SD08-052111SW	0	1.3
Copper, Dissolved[2]	18	9	50.00%	0.0428 J	SD01-072010SW1	0	1.3
Cyanide, Total[4]	30	0	0.00%	--	--	0	0.14
Lead, Total[2]	34	9	26.47%	0.299	SD01-031810-SW	7	0.015
Lead, Dissolved[2]	18	0	0.00%	--	--	0	0.015
Mercury, Total[3]	34	2	5.88%	0.00038 JB	SD08-052111SW	2	0.00005
Mercury, Dissolved[3]	18	0	0.00%	--	--	0	0.00005
Nickel, Total[1]	34	34	100.00%	0.368	SD08-052111SW	11	0.1
Nickel, Dissolved[1]	18	18	100.00%	0.11	SD01-052110-SW1	1	0.1
Selenium, Total[1]	34	31	91.18%	0.383 J	SD01-042210-SW	12	0.05
Selenium, Dissolved[1]	18	17	94.44%	0.0689 J	SD01-SSUMP-SW	4	0.05
Silver, Total[1]	34	6	17.65%	0.0011	SD01-092010SW1	0	0.1
Silver, Dissolved[1]	18	0	0.00%	--	--	0	0.1
Vanadium, Total[2]	34	24	70.59%	0.684	SD08-052111SW	8	0.078
Vanadium, Dissolved[2]	18	5	27.78%	0.0268	SD01-061610SW1	0	0.078
Zinc, Total[2]	34	26	76.47%	1.39	SD08-052111SW	0	2
Zinc, Dissolved[2]	18	2	11.11%	0.0164 J	SD03-072010SW	0	2

Notes:

[1] - Result from laboratory analytical method 6020

[2] - Result from laboratory analytical method SW 6010B

[3] - Result from laboratory analytical method SW 7470A

[4] - Result from laboratory analytical method SW 9012A

mg/L - milligrams per liter

-- - Constituent not detected

J - Estimated concentration

JB - Estimated concentration due to blank contamination

RBSL - Risk Based Screening Level

NA - Surface water standard or RBSL does not exist/apply

TABLE 5.1-5B. DATA SUMMARY, VOCs, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Volatile Organic Compounds	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Water Quality Standard Exceedances	Surface Water Quality Standards (mg/L)
Benzene	44	11	25.00%	0.47	SD01-072712-SW01	7	0.005
1,3-Butadiene	44	0	0.00%	--	--	0	0.000016
2-Butanone	44	1	2.27%	0.0012 J	SD08-052111SW	0	4.9
n-Butylbenzene	44	0	0.00%	--	--	0	0.78
sec-Butylbenzene	44	0	0.00%	--	--	0	NA
tert-Butylbenzene	44	0	0.00%	--	--	0	NA
Carbon Disulfide	44	0	0.00%	--	--	0	0.72
Chlorobenzene	44	0	0.00%	--	--	0	0.1
Chloroform	44	0	0.00%	--	--	0	0.057
Cyclohexane	44	4	9.09%	0.0078	SD01-SW01-121115	0	13
1,2-Dibromoethane	44	0	0.00%	--	--	0	0.000004
1,1-Dichloroethane	44	0	0.00%	--	--	0	0.0024
1,2-Dichloroethane	44	6	13.64%	0.0049	SD01-072712-SW01	1	0.0038
Ethylbenzene	44	0	0.00%	--	--	0	0.53
n-Hexane	44	0	0.00%	--	--	0	0.25
Isopropylbenzene	44	0	0.00%	--	--	0	0.39
Methyl Tertiary Butyl Ether (MTBE)	44	0	0.00%	--	--	0	0.03
n-Propylbenzene	44	0	0.00%	--	--	0	NA
Styrene	44	0	0.00%	--	--	0	0.1
Tetrachloroethene	44	0	0.00%	--	--	0	0.005
Toluene	44	8	18.18%	0.0041	SD01-072712-SW01	0	1
1,1,1-Trichloroethane	44	0	0.00%	--	--	0	0.2
Trichloroethene	44	0	0.00%	--	--	0	0.005
1,2,4-Trimethylbenzene	44	1	2.27%	0.0008 J	SD01-05032012SW1	0	0.015
1,3,5-Trimethylbenzene	44	0	0.00%	--	--	0	0.087
m,p-Xylene	44	3	6.82%	0.002 J	SD01-NSUMP-SW	0	10
o-Xylene	44	1	2.27%	0.0008 J	SD01-072712-SW01	0	10
Xylene (Total)	44	4	9.09%	0.0024 J	SD01-NSUMP-SW	0	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Constituent not detected
J - Estimated concentration
RBSL - Risk Based Screening Level
NA - Surface water standard or RBSL does not exist/apply

TABLE 5.1-5C. DATA SUMMARY, SVOCs, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Water Quality Standard Exceedances	Surface Water Quality Standards (mg/L)
Acenaphthene[1]	33	0	0.00%	--	--	0	0.67
Anthracene[1]	33	0	0.00%	--	--	0	8.3
Benzenethiol (Thiophenol)[1]	33	0	0.00%	--	--	0	0.013
Benzo(a)anthracene[2]	33	3	9.09%	0.000018 J	SD08-052111SW	0	0.000038
Benzo(a)pyrene[2]	33	3	9.09%	0.000018 J	SD01-052110-SW2	0	0.000038
Benzo(b)fluoranthene[2]	33	2	6.06%	0.000059 J	SD08-052111SW	1	0.000038
Benzo(k)fluoranthene[1]	33	0	0.00%	--	--	0	0.000038
Bis(2-Ethylhexyl)phthalate[1]	33	2	6.06%	0.05	SD01-061610SW1	1	0.006
Chrysene[1]	33	0	0.00%	--	--	0	0.000038
Dibenz(a,h)acridine[1]	33	0	0.00%	--	--	0	NA
Dibenz(a,h)anthracene[2]	33	1	3.03%	0.000014 J	SD07-061610SW	0	0.000038
1,2-Dichlorobenzene[1]	33	0	0.00%	--	--	0	0.42
1,3-Dichlorobenzene[1]	33	0	0.00%	--	--	0	0.32
1,4-Dichlorobenzene[1]	33	0	0.00%	--	--	0	0.075
Diethylphthalate[1]	33	0	0.00%	--	--	0	17
2,4-Dimethylphenol[1]	33	0	0.00%	--	--	0	0.38
Dimethylphthalate[1]	33	0	0.00%	--	--	0	270
Di-n-butylphthalate[1]	33	1	3.03%	0.002 J	DRAINAGE 01	0	2
2,4-Dinitrophenol[1]	33	0	0.00%	--	--	0	0.069
1,4-Dioxane[1]	33	0	0.00%	--	--	0	0.00067
Fluoranthene[1]	33	0	0.00%	--	--	0	0.13
Fluorene[1]	33	0	0.00%	--	--	0	1.1
Indene[1]	33	0	0.00%	--	--	0	NA
Indeno(1,2,3-cd)pyrene[2]	33	1	3.03%	0.000012 J	SD08-052111SW	0	0.000038
1-Methylnaphthalene[2]	33	8	24.24%	0.00011 J	SD08-052111SW	0	0.00097
2-Methylnaphthalene[1]	33	0	0.00%	--	--	0	0.027
2-Methylphenol[1]	33	0	0.00%	--	--	0	0.72
4-Methylphenol[1]	33	1	3.03%	0.005 J	SD01-052110-SW2	0	1.4
Naphthalene[2]	33	15	45.45%	0.000099 JB	SD01-061610SW2 Dup	0	0.1
4-Nitrophenol[1]	33	0	0.00%	--	--	0	0.06
Phenanthrene[1]	33	0	0.00%	--	--	0	NA
Phenol[1]	33	1	3.03%	0.009	SD01-052110-SW2	0	0.3
Pyrene[1]	33	0	0.00%	--	--	0	0.83
Pyridine[1]	33	0	0.00%	--	--	0	0.015
Tetraethyl Lead[1]	26	0	0.00%	--	--	0	0.00000099
Quinoline[1]	33	0	0.00%	--	--	0	0.000021

Notes:

[1] - Result from laboratory analytical method SW 8270C

[2] - Result from laboratory analytical method 8270C-SIM

mg/L - milligrams per liter

-- - Constituent not detected

J - Estimated concentration

RBSL - Risk Based Screening Level

NA - Surface water standard or RBSL does not exist/apply

TABLE 5.1-5D. DATA SUMMARY, EPH/VPH, SURFACE WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

EPH/VPH	Number of Samples	Detect Count	Detection Frequency*	Maximum Detected Concentration (mg/L)	Location of Maximum Detected Concentration	Number of Water Quality Standard Exceedances	Surface Water Quality Standards (mg/L)
C9-C18, Aliphatic, Adjusted [1]	11	1	3.85%	0.059	SD01-031810-SW	0	NA
C11-C22, Aromatic, Adjusted [1]	11	5	19.23%	0.77	SD01-052110-SW2	0	NA
C19-C36, Aliphatic, Adjusted [1]	11	6	23.08%	0.73 J	SD07-061610SW	0	NA
Total Extractable Hydrocarbons [1]	26	7	26.92%	1.2 J	SD01-052110-SW2	0	NA
C5-C8, Aliphatic, Adjusted [2]	44	2	4.55%	0.467 J	SD01-SW01-121115	0	NA
C9-C10, Aromatic, Adjusted [2]	44	0	0.00%	--	--	0	NA
C9-C12, Aliphatic, Adjusted [2]	44	0	0.00%	--	--	0	NA
Total Purgeable Hydrocarbon [2]	44	3	6.82%	0.989 J	SD01-072712-SW01	0	NA

Notes:

[1] - Result from laboratory analytical method MA-EPH

[2] - Result from laboratory analytical method MA-VPH

* - Samples analyzed for Total Extractable Hydrocarbons (T.E.H.) are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 1 mg/L. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

EPH - Extractable Petroleum Hydrocarbons

VPH - Volatile Petroleum Hydrocarbons

mg/L - milligrams per liter

-- - Constituent not detected

J - Estimated concentration

RBSL - Risk Based Screening Level

NA - Surface water standard or RBSL does not exist/apply

TABLE 5.2-1. ANALYTICAL RESULTS, INORGANIC CONSTITUENTS, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Antimony, Total[2] (mg/kg)	Arsenic, Total[1] (mg/kg)	Barium, Total[2] (mg/kg)	Beryllium, Total[2] (mg/kg)	Cadmium, Total[2] (mg/kg)	Chromium, Total[2] (mg/kg)	Cobalt, Total[2] (mg/kg)	Copper, Total[2] (mg/kg)
SD1-01	02/16/10	0	0.17	ND(2.8) UJ	7.59 J	145 J	0.334 J	ND(0.392)	11.5 J	2.72	11.4
SD1-02	02/16/10	0	0.17	ND(1.32) UJ	13.4 J	217 J	0.671	ND(0.184)	19.9 J	5.88	11.3
SD1-03	02/16/10	0	0.17	ND(1.5) UJ	13.3 J	278 J	0.952	ND(0.211)	30.3 J	9.41	16.5
SD1-03 Dup	02/16/10	0	0.17	ND(1.48) UJ	13.5 J	290 J	0.837	ND(0.208)	26.4 J	8.73	17.1
SD1-04	02/16/10	0	0.17	ND(1.25) UJ	15.3 J	322 J	0.902	ND(0.175)	25.7 J	7.8	15.3
SD2-01	02/16/10	0	0.17	ND(1.99) UJ	13.9 J	270 J	0.847 J	0.497 J	27.4 J	7.34	21.3
SD2-02	02/16/10	0	0.17	ND(1.46) UJ	24.5 J	297 J	0.803	ND(0.205)	25.8 J	7.53	19.2
SD2-03	02/16/10	0	0.17	ND(1.76) UJ	18.3 J	309 J	0.995	ND(0.246)	32.6 J	8.6	30.9
SD2-04	02/16/10	0	0.17	ND(1.13) UJ	18.6 J	312 J	0.893	ND(0.158)	27.6 J	7.98	21.5
SD3-01	02/16/10	0	0.17	ND(1.64) UJ	16 J	241 J	0.772 J	ND(0.231)	24.1 J	6.78	17.8
SD3-02	02/16/10	0	0.17	ND(1.67) UJ	11.1 J	307 J	1.25	ND(0.233)	37.7 J	7.9	22.2
SD3-03	02/16/10	0	0.17	1.61 J	14.3 J	232 J	0.738 J	ND(0.21)	22.8 J	6.77	16
SD2-05	02/17/10	0	0.17	ND(1.46) UJ	16.3 J	306 J	0.846	ND(0.204)	26.9 J	9.47	20.1
SD04-01	03/03/10	0	0.17	2.09 J	9.3	265	0.767 JB	0.442 J	25.7 J	7.63	22.9
SD05-01	03/03/10	0	0.17	1.45 J	8.3	256	0.74 JB	0.403 J	24.7 J	7.27	18.4
SD06-01	03/03/10	0	0.17	2.48 J	10.7	240	0.978 JB	0.764	25.6 J	7.38	23.7
SD07-01	03/03/10	0	0.17	2.43 J	7.61	318	0.905 JB	0.664 J	28.5 J	7.91	25.5
SD07-01 Dup	03/03/10	0	0.17	ND(2.08)	7.52	348	0.985 JB	0.639 J	31.8 J	8.6	27.4
SD08-01	03/03/10	0	0.17	ND(1.72)	6.85	283	1.32 JB	0.409 J	41.6 J	7.08	20.1
SD07-02	08/10/10	0	0.1	ND(1.58)	11	230 J	0.742 J	0.744 J	22.1 J	7.06	21
SD04-07	08/13/10	0	0.1	ND(1.31) UJ	12.6	192 J	0.613 J	0.763	17.1 J	6.11	18.4
SD04-07 Dup	08/13/10	0	0.1	ND(1.27) UJ	12	200 J	0.637 J	0.732	18.3 J	6.07	18.5
SD04-11	08/13/10	0	0.1	ND(1.22) UJ	10.5 J	253 J	0.849	0.608	24.3 J	7.44	21.6
SD04-13	08/13/10	0	0.1	ND(1.2)	10.4 J	280 J	0.857 JB	1.07	22.1 J	7.23	22.7
SD04-17	08/13/10	0	0.1	1.33 J	9.96 J	279 J	0.848 JB	1.03	22.9 J	7.26	23.3
SD04-23	08/18/10	0	0.1	1.38 J	12.2	289 J	1.05 JB	1.13	26.8 J	8.11	21.7
SD01-14	08/27/10	0	0.1	1.89 J	15.3	292 J	0.903	0.705	25 J	8.38	21.4
SD01-21	08/27/10	0	0.1	ND(1.18)	14.1	113 J	0.383 J	0.392 J	10.7 J	5.23	9.71
Metals Direct Contact RSLs				3.1	0.39	1500	16	7	12000	2.3	310
MDEQ Approved Sediment Background Value - SD01				1.539	20.27	264	0.9	1.719	29.16	9.716	29.14
MDEQ Approved Soil Background Value				0.368	25.1	392	0.817	1.17	30.8	9.13	26.6

TABLE 5.2-1. ANALYTICAL RESULTS, INORGANIC CONSTITUENTS, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Cyanide, Total[4] (mg/kg)	Lead, Total[2] (mg/kg)	Mercury, Total[3] (mg/kg)	Nickel, Total[2] (mg/kg)	Selenium, Total[2] (mg/kg)	Silver, Total[2] (mg/kg)	Vanadium, Total[2] (mg/kg)	Zinc, Total[2] (mg/kg)
SD1-01	02/16/10	1.05 J	193	ND(0.032) UJ	8.63	ND(2.74)	ND(0.503)	28.9 J	55.8
SD1-02	02/16/10	0.799	16.6	ND(0.0152) UJ	15.9	3.94	ND(0.237)	62.9 J	74.9
SD1-03	02/16/10	0.39 J	325	0.027 J	23.9	3.06	ND(0.27)	82.1 J	190
SD1-03 Dup	02/16/10	ND(0.275) UJ	293	0.0285 J	22.6	2.99	ND(0.267)	68.4 J	186
SD1-04	02/16/10	0.626	17.8	0.0426 J	22.7	2.37 J	ND(0.225)	72 J	88.4
SD2-01	02/16/10	1.47	66.1	0.0453 J	22.7	2.29 J	ND(0.358)	69.8 J	132
SD2-02	02/16/10	0.712 J	19.2	0.0483 J	24.4	1.89 J	ND(0.262)	80.3 J	108
SD2-03	02/16/10	0.798 J	38.8	0.0438 J	27.3	2.43 J	ND(0.316)	91.7 J	181
SD2-04	02/16/10	0.304 J	16.7	0.0418 J	25.7	2.45	ND(0.203)	79.6 J	108
SD3-01	02/16/10	1.01	12.2	0.0256 J	20.3	ND(1.61)	ND(0.296)	65 J	96
SD3-02	02/16/10	0.417 J	16.1	0.034 J	29.8	2.13 J	ND(0.3)	91.7 J	128
SD3-03	02/16/10	ND(0.271) UJ	11.8	0.0247 J	19.6	2.2 J	ND(0.268)	58.1 J	80.2
SD2-05	02/17/10	0.62 J	16.8	0.0274 J	25	1.83 J	ND(0.262)	77.3 J	104
SD04-01	03/03/10	ND(0.221)	1330	0.0528 J	23	ND(1.22)	ND(0.225)	57.6 J	93
SD05-01	03/03/10	ND(0.223)	38.3	0.0288 J	21.6	ND(1.24)	ND(0.227)	54.4 J	73.7
SD06-01	03/03/10	0.37 J	96.5	0.0687 J	22.3	1.73 J	ND(0.274)	58.6 J	137
SD07-01	03/03/10	0.83 J	55.6	0.0364 J	24.9	ND(1.9)	ND(0.348)	63 J	114
SD07-01 Dup	03/03/10	0.977 J	64.5	0.0499 J	26.8	ND(2.04)	ND(0.374)	70.5 J	121
SD08-01	03/03/10	0.448 J	19.7	ND(0.0201)	29	2.03 J	ND(0.31)	119 J	118
SD07-02	08/10/10	0.464 J	24.3	0.0336 J	18.9	ND(1.55) UJ	ND(0.285)	55.7 J	116
SD04-07	08/13/10	0.273 J	147	0.0368 J	16.9	ND(1.29)	ND(0.236)	39.7 J	91.5
SD04-07 Dup	08/13/10	0.299 J	178	0.0397 J	16.9	ND(1.25)	ND(0.229)	43.6 J	93.1
SD04-11	08/13/10	ND(0.207)	338 J	0.0474 JB	21.9	1.34 J	ND(0.219)	55 J	89.4
SD04-13	08/13/10	ND(0.205)	201 J	0.0336 JB	21.9	ND(1.18) UJ	0.335 J	48.7 J	91.2
SD04-17	08/13/10	ND(0.205)	632 J	0.1 JB	22.7	ND(1.16) UJ	0.355 J	48.6 J	78.6
SD04-23	08/18/10	ND(0.205)	18.5	0.0247 JB	25.9	1.3 J	0.319 J	65.3 J	94.2
SD01-14	08/27/10	ND(0.216)	161 J	0.0456 J	25.3	1.31 J	ND(0.21)	64.2 J	121
SD01-21	08/27/10	ND(0.219)	10.8 J	ND(0.0134)	14.2	ND(1.16)	ND(0.213)	33.6 J	55.5
Metals Direct Contact RSLs		4.7	400	2.3	150	39	39	39	2300
MDEQ Approved Sediment Background Value - SDC		NA	26.12	0.0635	30.05	1.902	0.342	67.31	143.8
MDEQ Approved Soil Background Value		NA	30.2	0.0837	32.6	2.09	0.168	63.9	119

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7471A
[4] - Result from laboratory analytical method SW 9012A
ft-bgs - feet below ground surface
J - Estimated concentration
JB - Estimated concentration due to blank contamination
UJ - Estimated reporting limit
mg/kg - milligrams per kilogram
XRF - x-ray fluorescence analyzer
ppm - parts per million
ND - Constituent not detected - method detection limit in mg/kg provided in parentheses
RSL - Screening level: If available, MDEQ risk-based screening level (RBSL) is used; if no MDEQ RBSL is available, US EPA Regional Screening Level (RSL) is used.
NA - RBSL/RSL not available
-- - Data not collected or not analyzed

TABLE 5.2-2. ANALYTICAL RESULTS, VOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Benzene (mg/kg)	2-Butanone (mg/kg)	n-Butylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	tert-Butylbenzene (mg/kg)	Carbon Disulfide (mg/kg)	Chlorobenzene (mg/kg)	Chloroform (mg/kg)	Cyclohexane (mg/kg)	1,2-Dibromoethane (mg/kg)
SD1-01	02/16/10	0	0.17	ND(0.00145)	ND(0.0116)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)
SD1-02	02/16/10	0	0.17	ND(0.000677)	ND(0.00542)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)
SD1-03	02/16/10	0	0.17	ND(0.00078)	ND(0.00624)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)
SD1-03 Dup	02/16/10	0	0.17	ND(0.000763)	ND(0.00611)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)
SD1-04	02/16/10	0	0.17	0.00075 J	ND(0.00501)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)
SD2-01	02/16/10	0	0.17	ND(0.000994)	ND(0.00795)	ND(0.00199) R	ND(0.00199) R	ND(0.00199) R	ND(0.00199)	ND(0.00199)	ND(0.00199)	ND(0.00199)	ND(0.00199)
SD2-02	02/16/10	0	0.17	ND(0.000757)	ND(0.00606)	ND(0.00152) R	ND(0.00152) R	ND(0.00152) R	ND(0.00152)	ND(0.00152)	ND(0.00152)	ND(0.00152)	ND(0.00152)
SD2-03	02/16/10	0	0.17	ND(0.000886)	ND(0.00709)	ND(0.00177) UJ	ND(0.00177) UJ	ND(0.00177) UJ	ND(0.00177)	ND(0.00177)	ND(0.00177)	ND(0.00177)	ND(0.00177)
SD2-04	02/16/10	0	0.17	ND(0.000563)	ND(0.0045)	ND(0.00113) R	ND(0.00113) R	ND(0.00113) R	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
SD3-01	02/16/10	0	0.17	ND(0.00083)	ND(0.00664)	ND(0.00166) R	ND(0.00166) R	ND(0.00166) R	ND(0.00166)	ND(0.00166)	ND(0.00166)	ND(0.00166)	ND(0.00166)
SD3-02	02/16/10	0	0.17	ND(0.000833)	ND(0.00667)	ND(0.00167) R	ND(0.00167) R	ND(0.00167) R	ND(0.00167)	ND(0.00167)	ND(0.00167)	ND(0.00167)	ND(0.00167)
SD3-03	02/16/10	0	0.17	ND(0.000754)	ND(0.00603)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)
SD2-05	02/17/10	0	0.17	ND(0.000756)	ND(0.00605)	ND(0.00151) R	ND(0.00151) R	ND(0.00151) R	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)
SD04-01	03/03/10	0	0.17	ND(0.00065)	ND(0.0052)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)
SD05-01	03/03/10	0	0.17	ND(0.000657)	ND(0.00526)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)
SD06-01	03/03/10	0	0.17	ND(0.00077)	ND(0.00616)	ND(0.00154) R	ND(0.00154) R	ND(0.00154) R	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00154)
SD07-01	03/03/10	0	0.17	ND(0.000988)	ND(0.00791)	ND(0.00198) R	ND(0.00198) R	ND(0.00198) R	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.00198)
SD07-01 Dup	03/03/10	0	0.17	ND(0.00106)	ND(0.00849)	ND(0.00212) R	ND(0.00212) R	ND(0.00212) R	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00212)
SD08-01	03/03/10	0	0.17	ND(0.000896)	ND(0.00717)	ND(0.00179) R	ND(0.00179) R	ND(0.00179) R	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.00179)
SD07-02	08/10/10	0	0.1	ND(0.0008)	ND(0.0064)	ND(0.00144) UJ	ND(0.00144) UJ	ND(0.00144) UJ	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.00144)
SD04-07	08/13/10	0	0.1	ND(0.000682)	ND(0.00546)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)
SD04-07 Dup	08/13/10	0	0.1	ND(0.00065)	ND(0.0052)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)
SD04-11	08/13/10	0	0.1	ND(0.000607)	ND(0.00486)	ND(0.00122) R	ND(0.00122) R	ND(0.00122) R	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
SD04-13	08/13/10	0	0.1	ND(0.000601)	ND(0.00481) UJ	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)
SD04-17	08/13/10	0	0.1	ND(0.000603)	ND(0.00483) UJ	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
SD04-23	08/18/10	0	0.1	ND(0.000568)	ND(0.00455)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
SD01-14	08/27/10	0	0.1	ND(0.000598)	ND(0.00479)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)
SD01-21	08/27/10	0	0.1	ND(0.000608)	ND(0.00487)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
Direct Exposure Surface (0-2 ft-bgs) RSLs		1	2800	NA	NA	NA	82	29	0.29	700	0.00002		

TABLE 5.2-2. ANALYTICAL RESULTS, VOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	1,1-Dichloroethane (mg/kg)	1,2-Dichloroethane (mg/kg)	Ethylbenzene (mg/kg)	n-Hexane (mg/kg)	Isopropylbenzene (mg/kg)	Methyl Tertiary Butyl Ether (MTBE) (mg/kg)	n-Propylbenzene (mg/kg)	Styrene (mg/kg)	Tetrachloroethene (mg/kg)	Toluene (mg/kg)	1,1,1-Trichloroethane (mg/kg)	Trichloroethene (mg/kg)
SD1-01	02/16/10	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291) UJ	ND(0.00291)	ND(0.00145)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)
SD1-02	02/16/10	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136) UJ	ND(0.00136)	ND(0.000677)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)
SD1-03	02/16/10	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156) UJ	ND(0.00156)	ND(0.00078)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)
SD1-03 Dup	02/16/10	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137) UJ	ND(0.00137)	ND(0.000763)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)
SD1-04	02/16/10	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125) UJ	ND(0.00125)	ND(0.000625)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)
SD2-01	02/16/10	ND(0.00199)	ND(0.00199)	ND(0.00199)	ND(0.00199) UJ	ND(0.00199)	ND(0.000994)	ND(0.00199) R	ND(0.00199)	ND(0.00199)	ND(0.00199)	ND(0.00199)	ND(0.00199)
SD2-02	02/16/10	ND(0.00152)	ND(0.00152)	ND(0.00152)	ND(0.00152) UJ	ND(0.00152)	ND(0.000757)	ND(0.00152) R	ND(0.00152)	ND(0.00152)	ND(0.00152)	ND(0.00152)	ND(0.00152)
SD2-03	02/16/10	ND(0.00177)	ND(0.00177)	ND(0.00177)	ND(0.00177) UJ	ND(0.00177)	ND(0.000886)	ND(0.00177) UJ	ND(0.00177)	ND(0.00177)	ND(0.00177)	ND(0.00177)	ND(0.00177)
SD2-04	02/16/10	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113) UJ	ND(0.00113)	ND(0.000563)	ND(0.00113) R	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)	ND(0.00113)
SD3-01	02/16/10	ND(0.00166)	ND(0.00166)	ND(0.00166)	ND(0.00166) UJ	ND(0.00166)	ND(0.00083)	ND(0.00166) R	ND(0.00166)	ND(0.00166)	0.00332 J	ND(0.00166)	ND(0.00166)
SD3-02	02/16/10	ND(0.00167)	ND(0.00167)	ND(0.00167)	ND(0.00167) UJ	ND(0.00167)	ND(0.000833)	ND(0.00167) R	ND(0.00167)	ND(0.00167)	0.005 J	ND(0.00167)	ND(0.00167)
SD3-03	02/16/10	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151) UJ	ND(0.00151)	ND(0.000754)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)
SD2-05	02/17/10	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151) UJ	ND(0.00151)	ND(0.000756)	ND(0.00151) R	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)
SD04-01	03/03/10	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.00065)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)
SD05-01	03/03/10	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.000657)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)
SD06-01	03/03/10	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00077)	ND(0.00154) R	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00154)	ND(0.00154)
SD07-01	03/03/10	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.000988)	ND(0.00198) R	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.00198)	ND(0.00198)
SD07-01 Dup	03/03/10	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00106)	ND(0.00212) R	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00212)	ND(0.00212)
SD08-01	03/03/10	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.000896)	ND(0.00179) R	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.00179)	ND(0.00179)
SD07-02	08/10/10	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.0008)	ND(0.00144) UJ	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.00144)	ND(0.00144)
SD04-07	08/13/10	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.000682)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)
SD04-07 Dup	08/13/10	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.00065)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)
SD04-11	08/13/10	ND(0.00122)	ND(0.00122)	ND(0.00122)	0.00122 J	ND(0.00122)	ND(0.000607)	ND(0.00122) R	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
SD04-13	08/13/10	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108) UJ	ND(0.00108)	ND(0.000601) UJ	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)
SD04-17	08/13/10	ND(0.00109)	ND(0.00109)	ND(0.00109)	0.00121 J	ND(0.00109)	ND(0.000603) UJ	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
SD04-23	08/18/10	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.000568)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
SD01-14	08/27/10	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.000598)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)
SD01-21	08/27/10	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.000608)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
Direct Exposure Surface (0-2 ft-bgs) RSLs		3.3	0.01	6	57	210	0.08	340	630	22	600	870	0.91

TABLE 5.2-2. ANALYTICAL RESULTS, VOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	1,2,4-Trimethylbenzene (mg/kg)	1,3,5-Trimethylbenzene (mg/kg)	m,p-Xylene (mg/kg)	o-Xylene (mg/kg)	Xylene (Total) (mg/kg)
SD1-01	02/16/10	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)	ND(0.00291)
SD1-02	02/16/10	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)	ND(0.00136)
SD1-03	02/16/10	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)	ND(0.00156)
SD1-03 Dup	02/16/10	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)	ND(0.00137)
SD1-04	02/16/10	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)	ND(0.00125)
SD2-01	02/16/10	ND(0.00199) R	ND(0.00199) R	ND(0.00199)	ND(0.00199)	ND(0.00199)
SD2-02	02/16/10	ND(0.00152) R	ND(0.00152) R	ND(0.00152)	ND(0.00152)	ND(0.00152)
SD2-03	02/16/10	ND(0.00177) UJ	ND(0.00177) UJ	ND(0.00177)	ND(0.00177)	ND(0.00177)
SD2-04	02/16/10	ND(0.00113) R	ND(0.00113) R	ND(0.00113)	ND(0.00113)	ND(0.00113)
SD3-01	02/16/10	ND(0.00166) R	ND(0.00166) R	0.00332 J	ND(0.00166)	0.00332 J
SD3-02	02/16/10	ND(0.00167) R	ND(0.00167) R	ND(0.00167)	ND(0.00167)	ND(0.00167)
SD3-03	02/16/10	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)	ND(0.00151)
SD2-05	02/17/10	ND(0.00151) R	ND(0.00151) R	ND(0.00151)	ND(0.00151)	ND(0.00151)
SD04-01	03/03/10	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)
SD05-01	03/03/10	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)	ND(0.00131)
SD06-01	03/03/10	ND(0.00154) R	ND(0.00154) R	ND(0.00154)	ND(0.00154)	ND(0.00154)
SD07-01	03/03/10	ND(0.00198) R	ND(0.00198) R	ND(0.00198)	ND(0.00198)	ND(0.00198)
SD07-01 Dup	03/03/10	ND(0.00212) R	ND(0.00212) R	ND(0.00212)	ND(0.00212)	ND(0.00212)
SD08-01	03/03/10	ND(0.00179) R	ND(0.00179) R	ND(0.00179)	ND(0.00179)	ND(0.00179)
SD07-02	08/10/10	ND(0.00144)	ND(0.00144) UJ	ND(0.00144)	ND(0.00144)	ND(0.00144)
SD04-07	08/13/10	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)	ND(0.00123)
SD04-07 Dup	08/13/10	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)
SD04-11	08/13/10	ND(0.00122) R	ND(0.00122) R	ND(0.00122)	ND(0.00122)	ND(0.00122)
SD04-13	08/13/10	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)	ND(0.00108)
SD04-17	08/13/10	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)	ND(0.00109)
SD04-23	08/18/10	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)	ND(0.00114)
SD01-14	08/27/10	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)
SD01-21	08/27/10	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)	ND(0.00122)
Direct Exposure Surface (0-2 ft-bgs) RSLs		6.2	78	59	69	70

Notes:
ft-bgs - feet below ground surface
J - Estimated concentration
R - Rejected, data not useable
mg/kg - milligrams per kilogram
ND - constituent not detected - method detection limit in mg/kg provided in parentheses
RSL - Screening level: If available, MDEQ risk-based screening level (RBSL) is used; if no MDEQ RBSL is available, US EPA Regional Screening Level (RSL) is used.
NA - RBSL/RSL not available

TABLE 5.2-3. ANALYTICAL RESULTS, SVOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzenethiol (Thiophenol) (mg/kg)	Benzo(a)anthracene (mg/kg)	Benzo(a)pyrene (mg/kg)	Benzo(b)fluoranthene (mg/kg)	Benzo(k)fluoranthene (mg/kg)	Bis(2-Ethylhexyl)phthalate (mg/kg)	Chrysene (mg/kg)
SD1-01	02/16/10	0	0.17	ND(0.0959)	ND(0.0959)	ND(0.959)	ND(0.0959)	ND(0.0145)	ND(0.0959)	ND(0.0959)	ND(0.195)	ND(0.0959)
SD1-02	02/16/10	0	0.17	ND(0.0447)	ND(0.0447)	ND(0.447)	ND(0.0447)	ND(0.00678)	ND(0.0447)	ND(0.0447)	ND(0.0908)	ND(0.0447)
SD1-03	02/16/10	0	0.17	ND(0.0515)	ND(0.0515)	ND(0.515)	ND(0.0515)	0.00889 J	ND(0.0515)	ND(0.0515)	ND(0.105)	ND(0.0515)
SD1-03 Dup	02/16/10	0	0.17	ND(0.0504)	ND(0.0504)	ND(0.504)	ND(0.0504)	ND(0.00763)	ND(0.0504)	ND(0.0504)	ND(0.102)	ND(0.0504)
SD1-04	02/16/10	0	0.17	ND(0.0413)	ND(0.0413)	ND(0.413)	ND(0.0413)	ND(0.00626)	ND(0.0413)	ND(0.0413)	ND(0.0839)	ND(0.0413)
SD2-01	02/16/10	0	0.17	ND(0.0656)	ND(0.0656)	ND(0.656)	ND(0.0656)	ND(0.00994)	ND(0.0656)	ND(0.0656)	ND(0.133)	ND(0.0656)
SD2-02	02/16/10	0	0.17	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.05)	ND(0.00758)	ND(0.05)	ND(0.05)	ND(0.102)	ND(0.05)
SD2-03	02/16/10	0	0.17	ND(0.0585)	ND(0.0585)	ND(0.585)	ND(0.0585)	0.0122 J	ND(0.0585)	ND(0.0585)	ND(0.119)	ND(0.0585)
SD2-04	02/16/10	0	0.17	ND(0.0372)	ND(0.0372)	ND(0.372)	ND(0.0372)	ND(0.00563)	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0372)
SD3-01	02/16/10	0	0.17	ND(0.0548)	ND(0.0548)	ND(0.548)	ND(0.0548)	ND(0.00831)	ND(0.0548)	ND(0.0548)	ND(0.111)	ND(0.0548)
SD3-02	02/16/10	0	0.17	ND(0.055)	ND(0.055)	ND(0.55)	ND(0.055)	ND(0.00833)	ND(0.055)	ND(0.055)	ND(0.112)	ND(0.055)
SD3-03	02/16/10	0	0.17	ND(0.0498)	ND(0.0498)	ND(0.498)	ND(0.0498)	ND(0.00754)	ND(0.0498)	ND(0.0498)	ND(0.101)	ND(0.0498)
SD2-05	02/17/10	0	0.17	ND(0.0499)	ND(0.0499)	ND(0.499)	ND(0.0499)	ND(0.00756)	ND(0.0499)	ND(0.0499)	ND(0.101)	ND(0.0499)
SD04-01	03/03/10	0	0.17	ND(0.0429)	ND(0.0429)	ND(0.429)	ND(0.0429)	ND(0.0065)	ND(0.0429)	ND(0.0429)	ND(0.0871)	ND(0.0429)
SD05-01	03/03/10	0	0.17	ND(0.0434)	ND(0.0434)	ND(0.434)	ND(0.0434)	0.0127 J	ND(0.0434)	ND(0.0434)	ND(0.088)	ND(0.0434)
SD06-01	03/03/10	0	0.17	ND(0.0508)	ND(0.0508)	ND(0.508)	ND(0.0508)	ND(0.0077)	ND(0.0508)	ND(0.0508)	ND(0.103)	ND(0.0508)
SD07-01	03/03/10	0	0.17	ND(0.0652)	ND(0.0652)	ND(0.652)	ND(0.0652)	0.0136 J	ND(0.0652)	ND(0.0652)	ND(0.132)	ND(0.0652)
SD07-01 Dup	03/03/10	0	0.17	ND(0.0701)	ND(0.0701)	ND(0.701)	ND(0.0701)	ND(0.0106)	ND(0.0701)	ND(0.0701)	ND(0.142)	ND(0.0701)
SD08-01	03/03/10	0	0.17	ND(0.0591)	ND(0.0591)	ND(0.591)	ND(0.0591)	0.0095 J	ND(0.0591)	ND(0.0591)	ND(0.12)	ND(0.0591)
SD07-02	08/10/10	0	0.1	ND(0.528)	ND(0.528)	ND(5.28)	ND(0.528)	ND(0.08)	ND(0.528)	ND(0.528)	ND(1.07)	ND(0.528)
SD04-07	08/13/10	0	0.1	ND(0.45)	ND(0.45)	ND(4.5)	ND(0.45)	ND(0.0682)	ND(0.45)	ND(0.45)	ND(0.914)	ND(0.45)
SD04-07 Dup	08/13/10	0	0.1	ND(0.429)	ND(0.429)	ND(4.29)	ND(0.429)	ND(0.065)	ND(0.429)	ND(0.429)	ND(0.871)	ND(0.429)
SD04-11	08/13/10	0	0.1	ND(0.0401)	ND(0.0401)	ND(0.401) UJ	ND(0.0401)	ND(0.00608)	ND(0.0401)	ND(0.0401)	ND(0.0814)	ND(0.0401)
SD04-13	08/13/10	0	0.1	ND(0.0397)	ND(0.0397)	ND(0.397) UJ	ND(0.0397)	ND(0.00602)	ND(0.0397)	ND(0.0397)	ND(0.0806)	ND(0.0397)
SD04-17	08/13/10	0	0.1	ND(0.0398)	0.106 J	ND(0.398) UJ	ND(0.0398)	ND(0.00603)	ND(0.0398)	ND(0.0398)	ND(0.0808)	ND(0.0398)
SD04-23	08/18/10	0	0.1	ND(0.0375)	ND(0.0375)	ND(0.375)	ND(0.0375)	0.00671 J	ND(0.0375)	ND(0.0375)	ND(0.0762)	ND(0.0375)
SD01-14	08/27/10	0	0.1	ND(0.0395)	ND(0.0395)	ND(0.395)	ND(0.0395)	ND(0.00599)	ND(0.0395)	ND(0.0395)	ND(0.0802)	ND(0.0395)
SD01-21	08/27/10	0	0.1	ND(0.0401)	ND(0.0401)	ND(0.401)	ND(0.0401)	ND(0.00608)	ND(0.0401)	ND(0.0401)	ND(0.0815)	ND(0.0401)
Direct Exposure Surface (0-2 ft-bgs) RSLs				400	2000	7.8	0.2	0.02	0.2	2	35	20

TABLE 5.2-3. ANALYTICAL RESULTS, SVOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dibenz(a,h)acridine (mg/kg)	Dibenz(a,h)anthracene (mg/kg)	1,2-Dichlorobenzene (mg/kg)	1,3-Dichlorobenzene (mg/kg)	1,4-Dichlorobenzene (mg/kg)	Diethylphthalate (mg/kg)	2,4-Dimethylphenol (mg/kg)	Dimethylphthalate (mg/kg)	Di-n-butylphthalate (mg/kg)
SD1-01	02/16/10	ND(0.0959)	ND(0.0145)	ND(0.0959)	ND(0.0959)	ND(0.0959)	ND(0.195)	ND(0.195)	ND(0.195)	ND(0.195)
SD1-02	02/16/10	ND(0.0447)	ND(0.00678)	ND(0.0447)	ND(0.0447)	ND(0.0447)	ND(0.0908)	ND(0.0908)	ND(0.0908)	ND(0.0908)
SD1-03	02/16/10	ND(0.0515)	ND(0.0078)	ND(0.0515)	ND(0.0515)	ND(0.0515)	ND(0.105)	ND(0.105)	ND(0.105)	ND(0.105)
SD1-03 Dup	02/16/10	ND(0.0504)	ND(0.00763)	ND(0.0504)	ND(0.0504)	ND(0.0504)	ND(0.102)	ND(0.102)	ND(0.102)	ND(0.102)
SD1-04	02/16/10	ND(0.0413)	ND(0.00626)	ND(0.0413)	ND(0.0413)	ND(0.0413)	ND(0.0839)	ND(0.0839)	ND(0.0839)	ND(0.0839)
SD2-01	02/16/10	ND(0.0656)	ND(0.00994)	ND(0.0656)	ND(0.0656)	ND(0.0656)	ND(0.133)	ND(0.133)	ND(0.133)	ND(0.133)
SD2-02	02/16/10	ND(0.05)	ND(0.00758)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.102)	ND(0.102)	ND(0.102)	ND(0.102)
SD2-03	02/16/10	ND(0.0585)	ND(0.00887)	ND(0.0585)	ND(0.0585)	ND(0.0585)	ND(0.119)	ND(0.119)	ND(0.119)	ND(0.119)
SD2-04	02/16/10	ND(0.0372)	ND(0.00563)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0755)	ND(0.0755)	ND(0.0755)
SD3-01	02/16/10	ND(0.0548)	ND(0.00831)	ND(0.0548)	ND(0.0548)	ND(0.0548)	ND(0.111)	ND(0.111)	ND(0.111)	ND(0.111)
SD3-02	02/16/10	ND(0.055)	0.0148 J	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.112)	ND(0.112)	ND(0.112)	ND(0.112)
SD3-03	02/16/10	ND(0.0498)	ND(0.00754)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.101)	ND(0.101)	ND(0.101)	ND(0.101)
SD2-05	02/17/10	ND(0.0499)	ND(0.00756)	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.101)	ND(0.101)	ND(0.101)	ND(0.101)
SD04-01	03/03/10	ND(0.0429)	ND(0.0065)	ND(0.0429)	ND(0.0429)	ND(0.0429)	ND(0.0871)	ND(0.0871)	ND(0.0871)	ND(0.0871)
SD05-01	03/03/10	ND(0.0434)	0.0106 J	ND(0.0434)	ND(0.0434)	ND(0.0434)	ND(0.088)	ND(0.088)	ND(0.088)	ND(0.088)
SD06-01	03/03/10	ND(0.0508)	ND(0.0077)	ND(0.0508)	ND(0.0508)	ND(0.0508)	ND(0.103)	ND(0.103)	ND(0.103)	ND(0.103)
SD07-01	03/03/10	ND(0.0652)	ND(0.00988)	ND(0.0652)	ND(0.0652)	ND(0.0652)	ND(0.132)	ND(0.132)	ND(0.132)	ND(0.132)
SD07-01 Dup	03/03/10	ND(0.0701)	ND(0.0106)	ND(0.0701)	ND(0.0701)	ND(0.0701)	ND(0.142)	ND(0.142)	ND(0.142)	ND(0.142)
SD08-01	03/03/10	ND(0.0591)	ND(0.00896)	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)
SD07-02	08/10/10	ND(0.528)	ND(0.08)	ND(0.528)	ND(0.528)	ND(0.528)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)
SD04-07	08/13/10	ND(0.45)	ND(0.0682)	ND(0.45) UJ	ND(0.45)	ND(0.45)	ND(0.914)	ND(0.914)	ND(0.914)	ND(0.914)
SD04-07 Dup	08/13/10	ND(0.429)	ND(0.065)	ND(0.429) UJ	ND(0.429)	ND(0.429)	ND(0.871)	ND(0.871)	ND(0.871)	ND(0.871)
SD04-11	08/13/10	ND(0.0401)	ND(0.00608)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0814)	ND(0.0814)	ND(0.0814)	ND(0.0814)
SD04-13	08/13/10	ND(0.0397)	ND(0.00602)	ND(0.0397)	ND(0.0397)	ND(0.0397)	ND(0.0806)	ND(0.0806)	ND(0.0806)	ND(0.0806)
SD04-17	08/13/10	ND(0.0398)	ND(0.00603)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0808)	ND(0.0808)	ND(0.0808)	ND(0.0808)
SD04-23	08/18/10	ND(0.0375) UJ	0.0058 J	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0762)	ND(0.0762)	ND(0.0762)	ND(0.0762)
SD01-14	08/27/10	ND(0.0395)	ND(0.00599)	ND(0.0395)	ND(0.0395)	ND(0.0395)	ND(0.0802)	ND(0.0802)	ND(0.0802)	ND(0.0802)
SD01-21	08/27/10	ND(0.0401)	ND(0.00608)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0815)	ND(0.0815)	ND(0.0815)	ND(0.0815)
Direct Exposure Surface (0-2 ft-bgs) RSLs		NA	0.02	190	NA	2.4	4900	120	NA	610

TABLE 5.2-3. ANALYTICAL RESULTS, SVOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	2,4-Dinitrophenol (mg/kg)	1,4-Dioxane (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indene (mg/kg)	Indeno(1,2,3-cd)pyrene (mg/kg)	1-Methylnaphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	2-Methylphenol (mg/kg)
SD1-01	02/16/10	ND(1.95) UJ	ND(0.291)	ND(0.0959)	ND(0.0959)	ND(0.0959)	ND(0.0959)	ND(0.0959)	ND(0.0959)	ND(0.195)
SD1-02	02/16/10	ND(0.908) UJ	ND(0.136)	ND(0.0447)	ND(0.0447)	ND(0.0447)	ND(0.0447)	ND(0.0447)	ND(0.0447)	ND(0.0908)
SD1-03	02/16/10	ND(1.05) UJ	ND(0.156)	ND(0.0515)	ND(0.0515)	ND(0.0515)	ND(0.0515)	ND(0.0515)	ND(0.0515)	ND(0.105)
SD1-03 Dup	02/16/10	ND(1.02) UJ	ND(0.153)	ND(0.0504)	ND(0.0504)	ND(0.0504)	ND(0.0504)	ND(0.0504)	ND(0.0504)	ND(0.102)
SD1-04	02/16/10	ND(0.839) UJ	ND(0.125)	ND(0.0413)	ND(0.0413)	ND(0.0413)	ND(0.0413)	ND(0.0413)	ND(0.0413)	ND(0.0839)
SD2-01	02/16/10	ND(1.33) UJ	ND(0.199)	ND(0.0656)	ND(0.0656)	ND(0.0656)	ND(0.0656)	ND(0.0656)	ND(0.0656)	ND(0.133)
SD2-02	02/16/10	ND(1.02) UJ	ND(0.152)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.102)
SD2-03	02/16/10	ND(1.19) UJ	ND(0.177)	ND(0.0585)	ND(0.0585)	ND(0.0585)	ND(0.0585)	ND(0.0585)	ND(0.0585)	ND(0.119)
SD2-04	02/16/10	ND(0.755) R	ND(0.113)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0755)
SD3-01	02/16/10	ND(1.11) UJ	ND(0.166)	ND(0.0548)	ND(0.0548)	ND(0.0548)	ND(0.0548)	ND(0.0548)	ND(0.0548)	ND(0.111)
SD3-02	02/16/10	ND(1.12) UJ	ND(0.167)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.112)
SD3-03	02/16/10	ND(1.01) UJ	ND(0.151)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.101)
SD2-05	02/17/10	ND(1.01) UJ	ND(0.151)	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.101)
SD04-01	03/03/10	ND(0.871)	ND(0.13)	ND(0.0429)	ND(0.0429)	ND(0.0429)	ND(0.0429)	ND(0.0429)	ND(0.0429)	ND(0.0871)
SD05-01	03/03/10	ND(0.88)	ND(0.131)	ND(0.0434)	ND(0.0434)	ND(0.0434)	ND(0.0434)	ND(0.0434)	ND(0.0434)	ND(0.088)
SD06-01	03/03/10	ND(1.03)	ND(0.154)	ND(0.0508)	ND(0.0508)	ND(0.0508)	ND(0.0508)	ND(0.0508)	ND(0.0508)	ND(0.103)
SD07-01	03/03/10	ND(1.32)	ND(0.198)	ND(0.0652)	ND(0.0652)	ND(0.0652)	ND(0.0652)	ND(0.0652)	ND(0.0652)	ND(0.132)
SD07-01 Dup	03/03/10	ND(1.42)	ND(0.212)	ND(0.0701)	ND(0.0701)	ND(0.0701)	ND(0.0701)	ND(0.0701)	ND(0.0701)	ND(0.142)
SD08-01	03/03/10	ND(1.2)	ND(0.179)	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.12)
SD07-02	08/10/10	ND(10.7)	ND(1.6)	ND(0.528)	ND(0.528)	ND(0.528)	ND(0.528)	ND(0.528)	ND(0.528)	ND(1.07)
SD04-07	08/13/10	ND(9.14)	ND(1.36)	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.914)
SD04-07 Dup	08/13/10	ND(8.71)	ND(1.3)	ND(0.429)	ND(0.429)	ND(0.429)	ND(0.429)	ND(0.429)	ND(0.429)	ND(0.871)
SD04-11	08/13/10	ND(0.814) UJ	ND(0.122)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0814)
SD04-13	08/13/10	ND(0.806) UJ	ND(0.12)	ND(0.0397)	ND(0.0397)	ND(0.0397)	ND(0.0397)	ND(0.0397)	ND(0.0397)	ND(0.0806)
SD04-17	08/13/10	ND(0.808) UJ	ND(0.121)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0808)
SD04-23	08/18/10	ND(0.762)	ND(0.114)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0762)
SD01-14	08/27/10	ND(0.802)	ND(0.12)	ND(0.0395)	ND(0.0395)	ND(0.0395)	ND(0.0395)	ND(0.0395)	ND(0.0395)	ND(0.0802)
SD01-21	08/27/10	ND(0.815)	ND(0.122)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0815)
Direct Exposure Surface (0-2 ft-bgs) RSLs		12	4.9	300	300	NA	0.2	16	23	310

TABLE 5.2-3. ANALYTICAL RESULTS, SVOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	4-Methylphenol (mg/kg)	Naphthalene (mg/kg)	4-Nitrophenol (mg/kg)	Phenanthrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	Pyridine (mg/kg)	Tetraethyl Lead (mg/kg)	Quinoline (mg/kg)
SD1-01	02/16/10	ND(0.195)	ND(0.0959)	ND(0.494)	ND(0.0959)	ND(0.0959)	ND(0.0959)	ND(0.195)	ND(0.0959)	ND(0.0959)
SD1-02	02/16/10	ND(0.0908)	ND(0.0447)	ND(0.23)	ND(0.0447)	ND(0.0447)	ND(0.0447)	ND(0.0908)	ND(0.0447)	ND(0.0447)
SD1-03	02/16/10	ND(0.105)	ND(0.0515)	ND(0.265)	ND(0.0515)	ND(0.0515)	ND(0.0515)	ND(0.105)	ND(0.156)	ND(0.0515)
SD1-03 Dup	02/16/10	ND(0.102)	ND(0.0504)	ND(0.26)	ND(0.0504)	ND(0.0504)	ND(0.0504)	ND(0.102)	ND(0.0504)	ND(0.0504)
SD1-04	02/16/10	ND(0.0839)	ND(0.0413)	ND(0.213)	ND(0.0413)	ND(0.0413)	ND(0.0413)	ND(0.0839)	ND(0.0413)	ND(0.0413)
SD2-01	02/16/10	ND(0.133)	ND(0.0656)	ND(0.338)	ND(0.0656)	ND(0.0656)	ND(0.0656)	ND(0.133)	ND(0.0656)	ND(0.0656)
SD2-02	02/16/10	ND(0.102)	ND(0.05)	ND(0.258)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.102)	ND(0.152)	ND(0.05)
SD2-03	02/16/10	ND(0.119)	ND(0.0585)	ND(0.301)	ND(0.0585)	ND(0.0585)	ND(0.0585)	ND(0.119)	ND(0.177)	ND(0.0585)
SD2-04	02/16/10	ND(0.0755)	ND(0.0372)	ND(0.191)	ND(0.0372)	ND(0.0372)	ND(0.0372)	ND(0.0755)	ND(0.0372)	ND(0.0372)
SD3-01	02/16/10	ND(0.111)	ND(0.0548)	ND(0.282)	ND(0.0548)	ND(0.0548)	ND(0.0548)	ND(0.111)	ND(0.0548)	ND(0.0548)
SD3-02	02/16/10	ND(0.112)	ND(0.055)	ND(0.283)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.112)	ND(0.055)	ND(0.055)
SD3-03	02/16/10	ND(0.101)	ND(0.0498)	ND(0.256)	ND(0.0498)	ND(0.0498)	ND(0.0498)	ND(0.101)	ND(0.151)	ND(0.0498)
SD2-05	02/17/10	ND(0.101)	ND(0.0499)	ND(0.257)	ND(0.0499)	ND(0.0499)	ND(0.0499)	ND(0.101)	ND(0.151)	ND(0.0499)
SD04-01	03/03/10	ND(0.0871)	ND(0.0429)	ND(0.221)	ND(0.0429)	ND(0.0429)	ND(0.0429)	ND(0.0871)	ND(0.0429)	ND(0.0429)
SD05-01	03/03/10	ND(0.088)	ND(0.0434)	ND(0.223)	ND(0.0434)	ND(0.0434)	ND(0.0434)	ND(0.088)	ND(0.0434) UJ	ND(0.0434)
SD06-01	03/03/10	ND(0.103)	ND(0.0508)	ND(0.262)	ND(0.0508)	ND(0.0508)	ND(0.0508)	ND(0.103)	ND(0.0508)	ND(0.0508)
SD07-01	03/03/10	ND(0.132)	ND(0.0652)	ND(0.336)	ND(0.0652)	ND(0.0652)	ND(0.0652)	ND(0.132)	ND(0.0652) UJ	ND(0.0652)
SD07-01 Dup	03/03/10	ND(0.142)	ND(0.0701)	ND(0.361)	ND(0.0701)	ND(0.0701)	ND(0.0701)	ND(0.142)	ND(0.0701) UJ	ND(0.0701)
SD08-01	03/03/10	ND(0.12)	ND(0.0591)	ND(0.305)	ND(0.0591)	ND(0.0591)	ND(0.0591)	ND(0.12)	ND(0.0591) UJ	ND(0.0591)
SD07-02	08/10/10	ND(1.07)	ND(0.528)	ND(2.72)	ND(0.528)	ND(0.528)	ND(0.528)	ND(1.07)	ND(0.528)	ND(0.528)
SD04-07	08/13/10	ND(0.914)	ND(0.45)	ND(2.32)	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.914)	ND(0.045)	ND(0.45)
SD04-07 Dup	08/13/10	ND(0.871)	ND(0.429)	ND(2.21)	ND(0.429)	ND(0.429)	ND(0.429)	ND(0.871)	ND(0.0429)	ND(0.429)
SD04-11	08/13/10	ND(0.0814)	ND(0.0401)	ND(0.207)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0814)	ND(0.0401)	ND(0.0401)
SD04-13	08/13/10	ND(0.0806)	ND(0.0397)	ND(0.205)	ND(0.0397)	ND(0.0397)	ND(0.0397)	ND(0.0806)	ND(0.0397)	ND(0.0397)
SD04-17	08/13/10	ND(0.0808)	ND(0.0398)	ND(0.205)	ND(0.0398)	ND(0.0398)	ND(0.0398)	ND(0.0808)	ND(0.0398)	ND(0.0398)
SD04-23	08/18/10	ND(0.0762)	ND(0.0375)	ND(0.193)	ND(0.0375)	ND(0.0375)	ND(0.0375)	ND(0.0762)	ND(0.0375)	ND(0.0375)
SD01-14	08/27/10	ND(0.0802)	ND(0.0395)	ND(0.204)	ND(0.0395)	ND(0.0395)	ND(0.0395)	ND(0.0802)	ND(0.0395)	ND(0.0395)
SD01-21	08/27/10	ND(0.0815)	ND(0.0401)	ND(0.207)	ND(0.0401)	ND(0.0401)	ND(0.0401)	ND(0.0815)	ND(0.0401)	ND(0.0401)
Direct Exposure Surface (0-2 ft-bgs) RSLs		610	4	NA	NA	1800	200	7.8	0.00061	0.16

Notes:
ft-bgs - feet below ground surface
J - Estimated concentration
JB – Estimated concentration due to blank contamination
UJ - Estimated reporting limit
R - Rejected, data not useable
mg/kg - milligrams per kilogram
NA - RBSL/RSL not available
ND - Constituent not detected - method detection limit in mg/kg provided in parentheses
RSL - Screening level: If available, MDEQ risk-based screening level (RBSL) is used; if no MDEQ RBSL is available, US EPA Regional Screening Level (RSL) is used.

TABLE 5.2-4. ANALYTICAL RESULTS, EPH/VPH, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Start Depth (ft-bgs)	End Depth (ft-bgs)	Total Extractable Hydrocarbons [1] (mg/kg)	C5-C8, Aliphatic, Adjusted [2] (mg/kg)	C9-C10, Aromatic, Adjusted [2] (mg/kg)	C9-C12, Aliphatic, Adjusted [2] (mg/kg)	C9-C18, Aliphatic, Adjusted [1] (mg/kg)	C11-C22, Aromatic, Adjusted [1] (mg/kg)	C19-C36, Aliphatic, Adjusted [1] (mg/kg)	Total Purgeable Hydrocarbon [2] (mg/kg)
SD1-01	02/16/10	0	0.17	116 J	ND(9.33)	ND(9.33)	ND(9.33) UJ	ND(17.4) UJ	49.4 J	64 J	ND(9.33)
SD1-02	02/16/10	0	0.17	ND(271)[3]	ND(4.16)	ND(4.16)	ND(4.16) UJ	--	--	--	ND(4.16)
SD1-03	02/16/10	0	0.17	ND(312)[3]	ND(4.74)	ND(4.74)	ND(4.74) UJ	--	--	--	ND(4.74)
SD1-03 Dup	02/16/10	0	0.17	ND(305)[3]	ND(4.73)	ND(4.73)	ND(4.73) UJ	--	--	--	ND(4.73)
SD1-04	02/16/10	0	0.17	ND(250)[3]	ND(3.67)	ND(3.67)	ND(3.67) UJ	--	--	--	ND(3.67)
SD2-01	02/16/10	0	0.17	ND(398)[3]	ND(6.4)	ND(6.4)	ND(6.4) UJ	--	--	--	ND(6.4)
SD2-02	02/16/10	0	0.17	ND(303)[3]	ND(4.83)	ND(4.83)	ND(4.83) UJ	--	--	--	ND(4.83)
SD2-03	02/16/10	0	0.17	ND(355)[3]	ND(5.48)	ND(5.48)	ND(5.48) UJ	--	--	--	ND(5.48)
SD2-04	02/16/10	0	0.17	ND(225)[3]	ND(3.63)	ND(3.63)	ND(3.63) UJ	--	--	--	ND(3.63)
SD3-01	02/16/10	0	0.17	ND(332)[3]	ND(5.35)	ND(5.35)	ND(5.35) UJ	--	--	--	ND(5.35)
SD3-02	02/16/10	0	0.17	ND(333)[3]	ND(5.38)	ND(5.38)	ND(5.38) UJ	--	--	--	ND(5.38)
SD3-03	02/16/10	0	0.17	ND(302)[3]	ND(4.39)	ND(4.39)	ND(4.39) UJ	--	--	--	ND(4.39)
SD2-05	02/17/10	0	0.17	ND(303)[3]	ND(4.9)	ND(4.9)	ND(4.9) UJ	--	--	--	ND(4.9)
SD04-01	03/03/10	0	0.17	143 J	ND(4.11)	ND(4.11)	ND(4.11)	9.23	54.6	84.5	ND(4.11)
SD05-01	03/03/10	0	0.17	ND(263) UJ [3]	ND(4.06)	ND(4.06)	ND(4.06)	--	--	--	ND(4.06)
SD06-01	03/03/10	0	0.17	ND(308) UJ [3]	ND(4.13)	ND(4.13)	ND(4.13)	--	--	--	ND(4.13)
SD07-01	03/03/10	0	0.17	65.2 J	ND(6.44)	ND(6.44)	ND(6.44)	ND(11.9)	31.6	33.6	ND(6.44)
SD07-01 Dup	03/03/10	0	0.17	36.1 J	ND(6.39)	ND(6.39)	ND(6.39)	ND(12.7)	ND(51)	36.1	ND(6.39)
SD08-01	03/03/10	0	0.17	ND(358) UJ [3]	ND(5.3)	ND(5.3)	ND(5.3)	--	--	--	ND(5.3)
SD07-02	08/10/10	0	0.1	464 J	ND(4.62) UJ	ND(4.62)	ND(4.62)	ND(19.2) UJ	240	224 J	ND(4.62)
SD04-07	08/13/10	0	0.1	96.9 J	ND(3.33) UJ	ND(3.33)	ND(3.33)	ND(8.19)	46.4 J	50.5 J	ND(3.33)
SD04-07 Dup	08/13/10	0	0.1	24.7 J	ND(3.16) UJ	ND(3.16)	ND(3.16)	ND(7.8) UJ	24.7 J	ND(15.6) UJ	ND(3.16)
SD04-11	08/13/10	0	0.1	86.3 J	ND(3.56)	ND(3.56)	ND(3.56)	ND(7.29)	36.5 J	49.8	ND(3.56)
SD04-13	08/13/10	0	0.1	120 J	ND(2.89)	ND(2.89)	ND(2.89)	ND(7.22)	50.5 J	73.4	ND(2.89)
SD04-17	08/13/10	0	0.1	157 J	ND(3.86)	ND(3.86)	ND(3.86)	10.3	61.5 J	88.1	ND(3.86)
SD04-23	08/18/10	0	0.1	ND(228) UJ [3]	ND(2.81) UJ	ND(2.81)	ND(2.81)	--	--	--	ND(2.81)
SD01-14	08/27/10	0	0.1	ND(240)[3]	ND(2.98)	ND(2.98)	ND(2.98)	--	--	--	ND(2.98)
SD01-21	08/27/10	0	0.1	ND(243)[3]	ND(3.04)	ND(3.04)	ND(3.04)	--	--	--	ND(3.04)
Direct Exposure Surface (0-2 ft-bgs) RSLs				NA	60	100	100	200	500	20000	NA

Notes:
[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
[3] - Result from laboratory analytical method MT EPH Screen
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
ft-bgs - feet below ground surface
mg/kg - milligrams per kilogram
-- - Data not collected or not analyzed
ND - Constituent not detected - method detection limit in mg/kg provided in parentheses
J - Estimated concentration
RSL - Screening level: If available, MDEQ risk-based screening level (RBSL) is used; if no MDEQ RBSL is available, US EPA Regional Screening Level (RSL) is used.
NA - RBSL/RSL not available
UJ - Estimated reporting limit

TABLE 5.2-5A. DATA SUMMARY, INORGANIC CONSTITUENTS, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Inorganic Constituents	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration (depth in ft-bgs)	Direct Contact SL Exceedances	Site-Specific Background Exceedances[a]	Direct Contact SLs (mg/kg)	Site-Specific Background Values[a] (mg/kg)
Antimony, Total[1]	25	8	32.00%	2.48 J	SD06-01 (0-0.17 ft)	0	5	3.1	1.48
Arsenic, Total[1]	25	25	100.00%	24.5 J	SD2-02 (0-0.17 ft)	25	3	0.39	17.1
Barium, Total[2]	25	25	100.00%	322 J	SD1-04 (0-0.17 ft)	0	0	1,500	402
Beryllium, Total[1]	25	25	100.00%	1.32 JB	SD08-01 (0-0.17 ft)	0	3	16	1.03
Cadmium, Total[2]	25	14	56.00%	1.13	SD04-23 (0-0.1 ft)	0	0	7	1.33
Chromium, Total[2]	25	25	100.00%	41.6 J	SD08-01 (0-0.17 ft)	0	4	12,000	29.5
Cobalt, Total[2]	25	25	100.00%	9.47	SD2-05 (0-0.17 ft)	25	2	2.3	8.87
Copper, Total[2]	25	25	100.00%	30.9	SD2-03 (0-0.17 ft)	0	3	310	23.4
Cyanide, Total[4]	25	16	64.00%	1.47	SD2-01 (0-0.17 ft)	0	0	4.7	NA
Lead, Total[2]	25	25	100.00%	1330	SD04-01 (0-0.17 ft)	2	13	400	37.6
Mercury, Total[3]	25	21	84.00%	0.1 JB	SD04-17 (0-0.1 ft)	0	4	2.3	0.0479
Nickel, Total[1]	25	25	100.00%	29.8	SD3-02 (0-0.17 ft)	0	3	150	26.5
Selenium, Total[1]	25	15	60.00%	3.94	SD1-02 (0-0.17 ft)	0	2	39	2.59
Silver, Total[1]	25	3	12.00%	0.355 J	SD04-17 (0-0.1 ft)	0	0	39	0.375
Vanadium, Total[2]	25	25	100.00%	119 J	SD08-01 (0-0.17 ft)	23	7	39	75.2
Zinc, Total[2]	25	25	100.00%	190	SD1-03 (0-0.17 ft)	0	12	2,300	102

Notes:

[1] - Result from laboratory analytical method 6020

[2] - Result from laboratory analytical method SW 6010B

[3] - Result from laboratory analytical method SW 7470A

[4] - Result from laboratory analytical method SW 9012A

[a] - Background values calculated July 2012 per MDEQ recommended protocol. For some constituents, the background concentrations exceed the SLs; in those cases, the background concentrations are used as the screening criteria.

mg/kg - milligrams per kilogram

ft-bgs - feet below ground surface

-- - Constituent not detected

J - Estimated concentration

JB - Estimated concentration due to blank contamination

SL - Screening level determined via MDEQ flowchart procedures; listed SLs are those for surface soils (0-2 ft-bgs).

NA - Direct contact SL or background value does not exist/apply

TABLE 5.2-5B. DATA SUMMARY, VOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Volatile Organic Compounds	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration (depth in ft-bgs)	Direct Contact SL Exceedances	Direct Contact SLs (mg/kg)
Benzene	25	1	4.00%	0.00075 J	SD1-04 (0-0.17 ft)	0	1
2-Butanone	25	0	0.00%	--	--	0	2,800
n-Butylbenzene	25	0	0.00%	--	--	0	NA
sec-Butylbenzene	25	0	0.00%	--	--	0	NA
tert-Butylbenzene	25	0	0.00%	--	--	0	NA
Carbon Disulfide	25	0	0.00%	--	--	0	82
Chlorobenzene	25	0	0.00%	--	--	0	29
Chloroform	25	0	0.00%	--	--	0	0.29
Cyclohexane	25	0	0.00%	--	--	0	700
1,2-Dibromoethane	25	0	0.00%	--	--	0	0.00002
1,1-Dichloroethane	25	0	0.00%	--	--	0	3.3
1,2-Dichloroethane	25	0	0.00%	--	--	0	0.01
Ethylbenzene	25	0	0.00%	--	--	0	6
n-Hexane	25	2	8.00%	0.00122 J	SD04-11 (0-0.1 ft)	0	57
Isopropylbenzene	25	0	0.00%	--	--	0	210
Methyl Tertiary Butyl Ether (MTBE)	25	0	0.00%	--	--	0	0.08
n-Propylbenzene	25	0	0.00%	--	--	0	340
Styrene	25	0	0.00%	--	--	0	630
Tetrachloroethene	25	0	0.00%	--	--	0	22
Toluene	25	2	8.00%	0.005 J	SD3-02 (0-0.17 ft)	0	600
1,1,1-Trichloroethane	25	0	0.00%	--	--	0	870
Trichloroethene	25	0	0.00%	--	--	0	0.91
1,2,4-Trimethylbenzene	25	0	0.00%	--	--	0	6.2
1,3,5-Trimethylbenzene	25	0	0.00%	--	--	0	78
m,p-Xylene	25	1	4.00%	0.00332 J	SD3-01 (0-0.17 ft)	0	59
o-Xylene	25	0	0.00%	--	--	0	69
Xylenes, Total	25	1	4.00%	0.00332 J	SD3-01 (0-0.17 ft)	0	70

Notes:

All result are from laboratory analytical method SW 8260B

mg/kg - milligrams per kilogram

ft-bgs - feet below ground surface

-- - Constituent not detected

J - Estimated concentration

SL - Screening level determined via MDEQ flowchart procedures; listed SLs are those for surface soils (0-2 ft-bgs).

NA - Direct contact SL does not exist/apply

TABLE 5.2-5C. DATA SUMMARY, SVOCs, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Semi-Volatile Organic Compounds	Number of Samples	Detect Count	Detection Frequency	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration (depth in ft-bgs)	Direct Contact SL Exceedances	Direct Contact SLs (mg/kg)
Acenaphthene[1]	25	0	0.00%	--	--	0	400
Anthracene[1]	25	1	4.00%	0.106 J	SD04-17 (0-0.1 ft)	0	2,000
Benzenethiol (Thiophenol)[1]	25	0	0.00%	--	--	0	7.8
Benzo(a)anthracene[2]	25	0	0.00%	--	--	0	0.2
Benzo(a)pyrene[2]	25	6	24.00%	0.0136 J	SD07-01 (0-0.17 ft)	0	0.02
Benzo(b)fluoranthene[2]	25	0	0.00%	--	--	0	0.2
Benzo(k)fluoranthene[1]	25	0	0.00%	--	--	0	2
Bis(2-Ethylhexyl)phthalate[1]	25	0	0.00%	--	--	0	35
Chrysene[1]	25	0	0.00%	--	--	0	20
Dibenz(a,h)acridine[1]	25	0	0.00%	--	--	0	NA
Dibenz(a,h)anthracene[2]	25	3	12.00%	0.0148 J	SD3-02 (0-0.17 ft)	0	0.02
1,2-Dichlorobenzene[1]	25	0	0.00%	--	--	0	190
1,3-Dichlorobenzene[1]	25	0	0.00%	--	--	0	NA
1,4-Dichlorobenzene[1]	25	0	0.00%	--	--	0	2.4
Diethylphthalate[1]	25	0	0.00%	--	--	0	4,900
2,4-Dimethylphenol[1]	25	0	0.00%	--	--	0	120
Dimethylphthalate[1]	25	0	0.00%	--	--	0	NA
Di-n-butylphthalate[1]	25	0	0.00%	--	--	0	610
2,4-Dinitrophenol[1]	25	0	0.00%	--	--	0	12
1,4-Dioxane[1]	25	0	0.00%	--	--	0	4.9
Fluoranthene[1]	25	0	0.00%	--	--	0	300
Fluorene[1]	25	0	0.00%	--	--	0	300
Indene[1]	25	0	0.00%	--	--	0	NA
Indeno(1,2,3-cd)pyrene[2]	25	0	0.00%	--	--	0	0.2
1-Methylnaphthalene[2]	25	0	0.00%	--	--	0	16
2-Methylnaphthalene[1]	25	0	0.00%	--	--	0	23
2-Methylphenol[1]	25	0	0.00%	--	--	0	310
4-Methylphenol[1]	25	0	0.00%	--	--	0	610
Naphthalene[2]	25	0	0.00%	--	--	0	4
4-Nitrophenol[1]	25	0	0.00%	--	--	0	NA
Phenanthrene[1]	25	0	0.00%	--	--	0	NA
Phenol[1]	25	0	0.00%	--	--	0	1,800
Pyrene[1]	25	0	0.00%	--	--	0	200
Pyridine[1]	25	0	0.00%	--	--	0	7.8
Tetraethyl Lead[1]	25	0	0.00%	--	--	0	0.00061
Quinoline[1]	25	0	0.00%	--	--	0	0.16

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/kg - milligrams per kilogram
ft-bgs - feet below ground surface
-- - Constituent not detected
J - Estimated concentration
SL - Screening level determined via MDEQ flowchart procedures; listed SLs are those for surface soils (0-2 ft-bgs).
NA - Direct contact SL does not exist/apply

TABLE 5.2-5D. DATA SUMMARY, EPH/VPH, SEDIMENT
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

EPH/VPH	Number of Samples	Detect Count	Detection Frequency*	Maximum Detected Concentration (mg/kg)	Location of Maximum Detected Concentration (depth in ft-bgs)	Direct Contact SL Exceedances	Direct Contact SLs (mg/kg)
Total Extractable Hydrocarbons [1]	25	8	32.00%	1920 J	SD07-02 (0-0.1 ft)	0	NA
C5-C8, Aliphatic, Adjusted [2]	25	0	0.00%	--	--	0	60
C9-C10, Aromatic, Adjusted [2]	25	0	0.00%	--	--	0	100
C9-C12, Aliphatic, Adjusted [2]	25	0	0.00%	--	--	0	100
C9-C18, Aliphatic, Adjusted [1]	8	2	8.00%	10.3	SD04-17 (0-0.1 ft)	0	200
C11-C22, Aromatic, Adjusted [1]	8	8	32.00%	240	SD07-02 (0-0.1 ft)	0	500
C19-C36, Aliphatic, Adjusted [1]	8	8	32.00%	224 J	SD07-02 (0-0.1 ft)	0	20,000
Total Purgeable Hydrocarbon [2]	25	0	0.00%	--	--	0	NA

Notes:

[1] - Result from laboratory analytical method MA-EPH

[2] - Result from laboratory analytical method MA-VPH

* - Samples analyzed for Total Extractable Hydrocarbons (T.E.H.) are re-analyzed for the individual heavier hydrocarbon fractions (C9-C18, C11-C22, C19-C36) only if the T.E.H. concentration is greater than 200 mg/kg. Therefore, the detection frequency for the three heavier fractions is calculated using the total number of T.E.H. samples.

EPH - Extractable Petroleum Hydrocarbons

VPH - Volatile Petroleum Hydrocarbons

mg/kg - milligrams per kilogram

ft-bgs - feet below ground surface

-- - Constituent not detected

J - Estimated concentration

SL - Screening level determined via MDEQ flowchart procedures; listed SLs are those for surface soils (0-2 ft-bgs).

NA - Direct contact SL does not exist/apply

TABLE 6.1-1. ANALYTICAL RESULTS, INORGANICS, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Antimony, Total[1] (mg/L)	Antimony, Dissolved[1] (mg/L)	Arsenic, Total[1] (mg/L)	Arsenic, Dissolved[1] (mg/L)	Barium, Total[2] (mg/L)	Barium, Dissolved[2] (mg/L)	Beryllium, Total[1] (mg/L)	Beryllium, Dissolved[1] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.0015) UJ	--	ND(0.0048)	--	0.01	--	ND(0.00065)	--
SI30-SUMP1	08/19/10	0.0046	0.0042	0.0042	0.0042	0.047	0.0293	ND(0.00013)	ND(0.00013)
SI30-SUMP2	08/19/10	0.0019	0.0021	0.0026	0.0025	0.029	0.027	ND(0.00013)	ND(0.00013)
SI39-SUMP1	08/20/10	ND(0.0015)	ND(0.0015)	0.003	0.0018 J	0.0241	0.0199	ND(0.00065)	ND(0.00065)
SI39-SUMP1 Dup	08/20/10	ND(0.0015)	ND(0.0015)	0.0029	0.0022	0.0246	0.0193	ND(0.00065)	ND(0.00065)
SI39-SUMP1	06/07/11	**0.0149**	0.011	0.003	0.0029	0.0311	0.0271	ND(0.00013)	ND(0.00013)
SI42-SUMP1	08/20/10	ND(0.0015)	ND(0.0015)	0.0043	ND(0.0048)	0.0097	0.0096	ND(0.00065)	ND(0.00065)
SI44-SUMP1	09/14/10	ND(0.0003)	ND(0.0003)	ND(0.00095)	ND(0.00095)	0.0143	0.0103	ND(0.00013)	ND(0.00013)
SI46-SUMP1	09/15/10	ND(0.0003)	ND(0.0003)	ND(0.00095)	ND(0.00095)	0.014	0.0134	ND(0.00013)	ND(0.00013)
Groundwater Standard or RBSL (mg/L)		0.006	NA	0.01	NA	1	NA	0.004	NA

TABLE 6.1-1. ANALYTICAL RESULTS, INORGANICS, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Cadmium, Total[2] (mg/L)	Cadmium, Dissolved[2] (mg/L)	Chromium, Total[2] (mg/L)	Chromium, Dissolved[2] (mg/L)	Cobalt, Total[2] (mg/L)	Cobalt, Dissolved[2] (mg/L)	Copper, Total[2] (mg/L)	Copper, Dissolved[2] (mg/L)	Cyanide, Total[4] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.002)	--	ND(0.0034)	--	ND(0.0023)	--	0.0155	--	ND(0.005)
SI30-SUMP1	08/19/10	ND(0.002)	ND(0.002)	0.0279	0.0235	ND(0.0023)	ND(0.0023)	0.0787	0.0733	0.022
SI30-SUMP2	08/19/10	ND(0.002)	ND(0.002)	0.0085 J	0.007 J	ND(0.0023)	ND(0.0023)	0.032	0.0303	0.009 J
SI39-SUMP1	08/20/10	ND(0.002)	ND(0.002)	ND(0.0034)	ND(0.0034)	ND(0.0023)	ND(0.0023)	0.0189	0.0185	ND(0.005)
SI39-SUMP1 Dup	08/20/10	ND(0.002)	ND(0.002)	ND(0.0034)	ND(0.0034)	ND(0.0023)	ND(0.0023)	0.0195	0.0179	ND(0.005)
SI39-SUMP1	06/07/11	ND(0.002)	ND(0.002)	ND(0.0034)	ND(0.0034)	ND(0.0023)	ND(0.0023)	0.0539	0.0652	ND(0.005)
SI42-SUMP1	08/20/10	ND(0.002)	ND(0.002)	ND(0.0034)	ND(0.0034)	ND(0.0023)	ND(0.0023)	0.0361	0.0342	ND(0.005)
SI44-SUMP1	09/14/10	ND(0.002)	ND(0.002)	ND(0.0034)	ND(0.0034)	ND(0.0023)	ND(0.0023)	0.0073 J	0.0029 J	ND(0.005)
SI46-SUMP1	09/15/10	ND(0.002)	ND(0.002)	ND(0.0034)	ND(0.0034)	ND(0.0023)	ND(0.0023)	0.0313	0.027	ND(0.005)
Groundwater Standard or RBSL (mg/L)		0.005	NA	0.1	NA	0.0047	NA	1.3	NA	0.2

TABLE 6.1-1. ANALYTICAL RESULTS, INORGANICS, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Lead, Total[2] (mg/L)	Lead, Dissolved[2] (mg/L)	Mercury, Total[3] (mg/L)	Mercury, Dissolved[3] (mg/L)	Nickel, Total[1] (mg/L)	Nickel, Dissolved[1] (mg/L)	Selenium, Total[1] (mg/L)	Selenium, Dissolved[1] (mg/L)	Silver, Total[1] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.0069)	--	ND(0.00005) UJ	--	0.0054 J	--	**0.372**	--	ND(0.0004)
SI30-SUMP1	08/19/10	0.0121 J	ND(0.0069)	ND(0.000056) UJ	0.000078 JB	0.0046	0.0031	0.0091	0.0089	ND(0.00008)
SI30-SUMP2	08/19/10	ND(0.0069)	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.0026	0.0023	**0.0585**	0.0605	ND(0.00008)
SI39-SUMP1	08/20/10	0.0069 J	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.005	0.004	**0.152**	0.147	ND(0.00008)
SI39-SUMP1 Dup	08/20/10	0.0079 J	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.0052	0.0046	**0.151**	0.153	ND(0.00008)
SI39-SUMP1	06/07/11	ND(0.0069)	ND(0.0069)	ND(0.000026)	ND(0.000026)	0.0049	0.0048	**0.07**	0.0581	0.00043 J
SI42-SUMP1	08/20/10	ND(0.0069)	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.0047	0.0047	**0.199**	0.189	ND(0.00008)
SI44-SUMP1	09/14/10	ND(0.0069)	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.0011 J	0.00058 J	0.0027	0.0026	ND(0.00008)
SI46-SUMP1	09/15/10	ND(0.0069)	ND(0.0069)	ND(0.000056) UJ	ND(0.000056) UJ	0.00085 J	0.00081 J	0.0018 J	0.0019 J	ND(0.00008)
Groundwater Standard or RBSL (mg/L)		0.015	NA	0.002	NA	0.1	NA	0.05	NA	0.1

TABLE 6.1-1. ANALYTICAL RESULTS, INORGANICS, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Silver, Dissolved[1] (mg/L)	Vanadium, Total[2] (mg/L)	Vanadium, Dissolved[2] (mg/L)	Zinc, Total[2] (mg/L)	Zinc, Dissolved[2] (mg/L)
H2P1-SUMP1	03/30/11	--	ND(0.0025)	--	ND(0.0081)	--
SI30-SUMP1	08/19/10	ND(0.00008)	0.0104	0.0058	0.0534	0.0216
SI30-SUMP2	08/19/10	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.288	0.216
SI39-SUMP1	08/20/10	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.0561	0.0146 J
SI39-SUMP1 Dup	08/20/10	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.0598	0.0342 J
SI39-SUMP1	06/07/11	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.061	0.0519
SI42-SUMP1	08/20/10	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.263	0.182
SI44-SUMP1	09/14/10	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.0414	ND(0.0081)
SI46-SUMP1	09/15/10	ND(0.00008)	ND(0.0025)	ND(0.0025)	0.0373	0.0346
Groundwater Standard or RBSL (mg/L)		NA	0.078	NA	2	NA

Notes:
[1] - Result from laboratory analytical method 6020
[2] - Result from laboratory analytical method SW 6010B
[3] - Result from laboratory analytical method SW 7470A
[4] - Result from laboratory analytical method SW 9012A
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
JB - Estimated concentration due to blank contamination
UJ - Estimated reporting limit
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist
Values in **Bold** exceed Groundwater Standard or RBSL

TABLE 6.1-2. ANALYTICAL RESULTS, VOCs, RESIDENTIAL SUMP WATER
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Benzene (mg/L)	1,3-Butadiene (mg/L)	2-Butanone (mg/L)	n-Butylbenzene (mg/L)	sec-Butylbenzene (mg/L)	tert-Butylbenzene (mg/L)	Carbon Disulfide (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	Cyclohexane (mg/L)
H2P1-SUMP1	03/30/11	ND(0.001)	ND(0.001) UJ	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.004)	ND(0.001)	ND(0.001)	ND(0.001)
SI30-SUMP1	08/19/10	ND(0.0005)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI30-SUMP2	08/19/10	ND(0.0005)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI39-SUMP1	08/20/10	ND(0.0005)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI39-SUMP1 Dup	08/20/10	ND(0.0005)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI39-SUMP1	06/07/11	0.0009	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI42-SUMP1	08/20/10	ND(0.0005)	ND(0.0001)	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI44-SUMP1	09/14/10	ND(0.0005)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
SI46-SUMP1	09/15/10	ND(0.0005)	ND(0.0001) UJ	ND(0.001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0004)	ND(0.0001)	ND(0.0001)	ND(0.0001)
Groundwater Standard or RBSL (mg/L)		0.005	0.000016	4.9	0.78	NA	NA	0.72	0.1	0.07	13

TABLE 6.1-2. ANALYTICAL RESULTS, VOCs, RESIDENTIAL SUMP WATER
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Location ID	Date Sampled	1,2-Dibromoethane (mg/L)	1,1-Dichloroethane (mg/L)	1,2-Dichloroethane (mg/L)	Ethylbenzene (mg/L)	n-Hexane (mg/L)	Isopropylbenzene (mg/L)	Methyl Tertiary Butyl Ether (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)
H2P1-SUMP1	03/30/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)
SI30-SUMP1	08/19/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI30-SUMP2	08/19/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI39-SUMP1	08/20/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI39-SUMP1 Dup	08/20/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI39-SUMP1	06/07/11	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI42-SUMP1	08/20/10	ND(0.0001)	ND(0.0001)	0.0023	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI44-SUMP1	09/14/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
SI46-SUMP1	09/15/10	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.002)	ND(0.0001)	ND(0.0001)
Groundwater Standard or RBSL (mg/L)		0.000004	0.0024	0.004	0.7	NA	NA	0.03	NA	0.1

TABLE 6.1-2. ANALYTICAL RESULTS, VOCs, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Tetrachloroethene (mg/L)	Toluene (mg/L)	1,1,1-Trichloroethane (mg/L)	Trichloroethene (mg/L)	1,2,4-Trimethylbenzene (mg/L)	1,3,5-Trimethylbenzene (mg/L)	m,p-Xylene (mg/L)	o-Xylene (mg/L)	Xylene (Total) (mg/L)
H2P1-SUMP1	03/30/11	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)
SI30-SUMP1	08/19/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
SI30-SUMP2	08/19/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
SI39-SUMP1	08/20/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
SI39-SUMP1 Dup	08/20/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
SI39-SUMP1	06/07/11	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005) UJ
SI42-SUMP1	08/20/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
SI44-SUMP1	09/14/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
SI46-SUMP1	09/15/10	ND(0.0001)	ND(0.0005)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND(0.005)
Groundwater Standard or RBSL (mg/L)		0.005	1	0.2	0.005	0.015	0.087	10	10	10

Notes:
All result are from laboratory analytical method SW 8260B
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
UJ - Estimated reporting limit
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist

TABLE 6.1-3. ANALYTICAL RESULTS, SVOCs, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Acenaphthene[1] (mg/L)	Anthracene[1] (mg/L)	(Thiophenol)[1] (mg/L)	Benzo(a)anthracene[2] (mg/L)	Benzo(a)pyrene[2] (mg/L)	Benzo(b)fluoranthene[2] (mg/L)	Benzo(k)fluoranthene[1] (mg/L)	Bis(2-Ethylhexyl)phthalate[1] (mg/L)	Chrysene[1] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SI30-SUMP1	08/19/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)
SI30-SUMP2	08/19/10	ND(0.0009)	ND(0.0009)	ND(0.005)	ND(0.0000095)	0.000011 J	ND(0.0000095)	ND(0.0009)	ND(0.002)	ND(0.0009)
SI39-SUMP1	08/20/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.000011)	ND(0.000011)	ND(0.000011)	ND(0.001)	ND(0.002)	ND(0.001)
SI39-SUMP1 Dup	08/20/10	ND(0.001)	ND(0.001)	ND(0.006)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)	ND(0.002)	ND(0.001)
SI39-SUMP1	06/07/11	ND(0.001) UJ	ND(0.001) UJ	ND(0.005) UJ	0.00041 J	ND(0.00019)	0.00042 J	ND(0.001) UJ	**0.018**	ND(0.001) UJ
SI42-SUMP1	08/20/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)
SI44-SUMP1	09/14/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.00001)	ND(0.00001)	ND(0.00001)	ND(0.001)	ND(0.002)	ND(0.001)
SI46-SUMP1	09/15/10	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.0000097)	ND(0.0000097)	ND(0.0000097)	ND(0.001)	ND(0.002)	ND(0.001)
Groundwater Standard or RBSL (mg/L)		0.67	2.1	NA	0.0005	0.00005	0.0005	0.005	0.006	0.05

TABLE 6.1-3. ANALYTICAL RESULTS, SVOCs, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Dibenz(a,h)acridine[1] (mg/L)	Dibenz(a,h)anthracene[2] (mg/L)	1,2-Dichlorobenzene[1] (mg/L)	1,3-Dichlorobenzene[1] (mg/L)	1,4-Dichlorobenzene[1] (mg/L)	Diethylphthalate[1] (mg/L)	2,4-Dimethylphenol[1] (mg/L)	Dimethylphthalate[1] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
SI30-SUMP1	08/19/10	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
SI30-SUMP2	08/19/10	ND(0.0009)	ND(0.0000095)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.003)	ND(0.002)
SI39-SUMP1	08/20/10	ND(0.001)	ND(0.000011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
SI39-SUMP1 Dup	08/20/10	ND(0.001)	ND(0.00001) UJ	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
SI39-SUMP1	06/07/11	ND(0.001)	ND(0.00019)	ND(0.001) UJ	ND(0.001)	ND(0.001)	ND(0.002) UJ	ND(0.003)	ND(0.002)
SI42-SUMP1	08/20/10	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
SI44-SUMP1	09/14/10	ND(0.001)	ND(0.00001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
SI46-SUMP1	09/15/10	ND(0.001)	ND(0.0000097)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.003)	ND(0.002)
Groundwater Standard or RBSL (mg/L)		NA	0.00005	0.6	0.6	0.075	17	0.38	270

TABLE 6.1-3. ANALYTICAL RESULTS, SVOCs, RESIDENTIAL SUMP WATER
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Di-n-butylphthalate[1] (mg/L)	2,4-Dinitrophenol[1] (mg/L)	1,4-Dioxane[1] (mg/L)	Fluoranthene[1] (mg/L)	Fluorene[1] (mg/L)	Indene[1] (mg/L)	Indeno(1,2,3-cd)pyrene[2] (mg/L)	1-Methylnaphthalene[2] (mg/L)	2-Methylnaphthalene[1] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)
SI30-SUMP1	08/19/10	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)
SI30-SUMP2	08/19/10	ND(0.002)	ND(0.009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.0000095)	ND(0.0000095)	ND(0.0009)
SI39-SUMP1	08/20/10	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.000011)	ND(0.000011)	ND(0.001)
SI39-SUMP1 Dup	08/20/10	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001) UJ	ND(0.00001) UJ	ND(0.001)
SI39-SUMP1	06/07/11	ND(0.002) UJ	ND(0.01)	ND(0.001)	0.001 J	0.003 J	ND(0.001)	ND(0.00019)	**0.0021**	ND(0.001) UJ
SI42-SUMP1	08/20/10	ND(0.002)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)
SI44-SUMP1	09/14/10	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.00001)	ND(0.00001)	ND(0.001)
SI46-SUMP1	09/15/10	ND(0.002)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.0000097)	ND(0.0000097)	ND(0.001)
Groundwater Standard or RBSL (mg/L)		2	0.069	0.00067	0.13	1.1	NA	0.0005	0.00097	0.027

TABLE 6.1-3. ANALYTICAL RESULTS, SVOCs, RESIDENTIAL SUMP WATER
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	2-Methylphenol[1] (mg/L)	4-Methylphenol[1] (mg/L)	Naphthalene[2] (mg/L)	4-Nitrophenol[1] (mg/L)	Phenanthrene[1] (mg/L)	Phenol[1] (mg/L)	Pyrene[1] (mg/L)	Pyridine[1] (mg/L)	Tetraethyl Lead[1] (mg/L)	Quinoline[1] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.001)	ND(0.002)	ND(0.00003)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001) UJ
SI30-SUMP1	08/19/10	ND(0.001)	ND(0.002)	ND(0.0000097)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SI30-SUMP2	08/19/10	ND(0.0009)	ND(0.002)	ND(0.0000095)	ND(0.009)	ND(0.0009)	ND(0.0009)	ND(0.0009)	ND(0.002)	ND(0.002)	ND(0.0009)
SI39-SUMP1	08/20/10	ND(0.001)	ND(0.002)	0.000028 JB	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SI39-SUMP1 Dup	08/20/10	ND(0.001)	ND(0.002)	ND(0.00001) UJ	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SI39-SUMP1	06/07/11	ND(0.001)	ND(0.002) UJ	0.00079 J	ND(0.01)	0.007 J	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001) UJ
SI42-SUMP1	08/20/10	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.011)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SI44-SUMP1	09/14/10	ND(0.001)	ND(0.002)	ND(0.00001)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
SI46-SUMP1	09/15/10	ND(0.001)	ND(0.002)	ND(0.0000097)	ND(0.01)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.001)
Groundwater Standard or RBSL (mg/L)		0.72	1.4	0.1	0.06	NA	0.3	0.83	0.015	0.00000099	0.000021

Notes:
[1] - Result from laboratory analytical method SW 8270C
[2] - Result from laboratory analytical method 8270C-SIM
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
JB - Estimated concentration due to blank contamination
UJ - Estimated reporting limit
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist
Values in **Bold** exceed Groundwater Standard or RBSL

TABLE 6.1-4. ANALYTICAL RESULTS, EPH/VPH, RESIDENTIAL SUMP WATER
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location ID	Date Sampled	Total Extractable Hydrocarbons [1] (mg/L)	C5-C8, Aliphatic, Adjusted [2] (mg/L)	C9-C10, Aromatic, Adjusted [2] (mg/L)	C9-C12, Aliphatic, Adjusted [2] (mg/L)	C9-C18, Aliphatic, Adjusted [1] (mg/L)	C11-C22, Aromatic, Adjusted [1] (mg/L)	C19-C36, Aliphatic, Adjusted [1] (mg/L)	Total Purgeable Hydrocarbon [2] (mg/L)
H2P1-SUMP1	03/30/11	ND(0.5)[3]	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
SI30-SUMP1	08/19/10	ND(0.5)[3]	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
SI30-SUMP2	08/19/10	**1.6 J**	ND(0.05)	ND(0.02)	ND(0.02)	0.32 J	0.56	0.68	ND(0.05)
SI39-SUMP1	08/20/10	ND(0.5)[3]	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
SI39-SUMP1 Dup	08/20/10	ND(0.5)[3]	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
SI39-SUMP1	06/07/11	**170**	ND(0.05)	ND(0.02)	ND(0.02)	**54 J**	**11**	**100 J**	ND(0.05)
SI42-SUMP1	08/20/10	ND(0.5)[3]	ND(0.05) UJ	ND(0.02)	ND(0.02) UJ	--	--	--	ND(0.05) UJ
SI44-SUMP1	09/14/10	ND(0.5)[3]	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
SI46-SUMP1	09/15/10	ND(0.5)[3]	ND(0.05)	ND(0.02)	ND(0.02)	--	--	--	ND(0.05)
Groundwater Standard or RBSL (mg/L)		1	0.7	1	1	1	1	1	1

Notes:

[1] - Result from laboratory analytical method MA-EPH
[2] - Result from laboratory analytical method MA-VPH
[3] - Result from laboratory analytical method MT EPH Screen
EPH - Extractable Petroleum Hydrocarbons
VPH - Volatile Petroleum Hydrocarbons
mg/L - milligrams per liter
-- - Data not collected or analyzed
ND - Constituent not detected - method detection limit in mg/L provided in parentheses
J - Estimated concentration
UJ - Estimated reporting limit
RBSL - Risk Based Screening Level
NA - Groundwater Standard or RBSL does not exist
Values in **Bold** exceed Groundwater Standard or RBSL

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth	C5-C8, Aliphatic, Adjusted	C9-C10, Aromatic, Adjusted	C9-C12, Aliphatic, Adjusted	Benzene	Naphthalene	1,3-Butadiene	n-Butyl-benzene	sec-Butyl-benzene	tert-Butyl-benzene	Cyclohexane	Decane	1,2-Dibromo-ethane	1,2-Dichloro-ethane	Ethyl-benzene	4-Ethyltoluene	Heptane
				(ft-bgs)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)
Outdoor Air	OA1	outdoor air	5/08/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1	outdoor air	5/09/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	1.42	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1	outdoor air	5/10/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524) J	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1	outdoor air	5/11/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524) J	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1	outdoor air	5/12/06	0	33.9	ND(24)	58.4	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	1.41	2.5	ND(0.688)	ND(5.82)	--	--	2.35	--	--
	OA1	outdoor air	5/13/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1 Dup	outdoor air	5/13/06	0	ND(24)	ND(24)	ND(28)	ND(0.638) J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA1	outdoor air	5/15/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1	outdoor air	5/16/06	0	45.3	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548) J	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA1	outdoor air	9/18/06	0	ND(24)	ND(24)	ND(28)	0.869 J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA1	outdoor air	9/19/06	0	38	ND(24)	ND(28)	1.42 J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA1	outdoor air	9/20/06	0	41.9 J	ND(24)	58.4 J	1.67 J	3.16 J	ND(0.442) J	3.42 J	3.7 J	3.29 J	ND(0.688) J	ND(5.82) J	--	--	0.761 J	--	--
	OA1	outdoor air	9/21/06	0	ND(24)	ND(24)	ND(28)	ND(0.638) J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA1	outdoor air	10/05/06	0	ND(24)	ND(24)	ND(28)	ND(0.638) J	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	OA1	outdoor air	10/06/06	0	29.8	ND(24)	36.6	2.05 J	2.01	ND(0.442)	4.37	2.53	2.05	ND(0.688)	ND(5.82) J	--	--	1.59	--	--
	OA1	outdoor air	10/07/06	0	168 J	ND(24)	ND(28)	1.37 J	ND(0.524) J	ND(0.442)	0.634	ND(0.548) J	ND(0.548) J	4.4 J	ND(5.82) J	--	--	ND(0.434)	--	--
	OA1 Dup	outdoor air	10/07/06	0	30.3 J	ND(24)	31.6	ND(0.638) J	0.679 J	ND(0.442)	0.792	1.84 J	3.71 J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434)	--	--
	OA1	outdoor air	1/25/07	0	46.6	ND(24)	42.3	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	1.61 J	ND(5.82)	--	--	ND(0.868)	--	--
	OA1 Dup	outdoor air	1/25/07	0	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	0.908 J	ND(5.82)	--	--	ND(0.868)	--	--
	OA1	outdoor air	1/26/07	0	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	OA1	outdoor air	5/06/08	0	ND(66)	ND(16)	26	0.24	ND(0.33)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	0.047	0.094	ND(0.82)	--	--
	OA1	outdoor air	5/07/08	0	ND(66)	ND(16)	ND(16)	0.29	0.49	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.041)	0.065	ND(0.82)	--	--
	OA1 Dup	outdoor air	5/07/08	0	ND(74)	ND(19)	20	0.21	ND(0.37)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.047)	0.075	ND(0.93)	--	--
	OA1	outdoor air	5/08/08	0	ND(69)	ND(17)	ND(17)	0.22	ND(0.34)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.067	ND(0.86)	--	--
	OA1	outdoor air	5/08/08	0	ND(62)	ND(15)	ND(15)	0.21	ND(0.31)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.039)	0.064	ND(0.77)	--	--
	OA1	outdoor air	3/14/09	0	ND(25)	ND(6.4)	ND(13)	0.26	ND(0.032)	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.032)	0.076 J	ND(0.64)	ND(0.64)	ND(0.64)
	OA1	outdoor air	3/15/09	0	ND(33)	ND(8.4)	ND(17)	0.31	0.1	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.042)	0.082 J	ND(0.84)	ND(0.84)	ND(0.84)
	OA1	outdoor air	3/16/09	0	ND(35)	ND(8.9)	ND(18)	0.41	ND(0.044)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.044)	0.089 J	ND(0.89)	ND(0.89)	ND(0.89)
	OA1	outdoor air	3/17/09	0	ND(30)	ND(7.5)	ND(15)	0.42	0.044	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.037)	0.075	ND(0.75)	ND(0.75)	ND(0.75)
	OA1	outdoor air	3/18/09	0	ND(29)	ND(7.3)	ND(15)	0.37	0.04	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.037)	0.082	ND(0.73)	ND(0.73)	ND(0.73)
	OA1	outdoor air	3/19/09	0	ND(31)	ND(7.8)	17	0.32	0.17	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.075	ND(0.78)	ND(0.78)	ND(0.78)
	OA1	outdoor air	3/20/09	0	ND(39)	ND(9.7)	69	ND(0.19)	0.26	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.048)	0.077	ND(0.97)	ND(0.97)	ND(0.97)
	OA1	outdoor air	3/21/09	0	ND(42)	ND(11)	ND(21)	0.34	0.065	ND(0.21)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.053)	0.075	ND(1.1)	ND(1.1)	ND(1.1)
	OA1	outdoor air	6/03/09	0	ND(33)	ND(8.2)	ND(16)	ND(0.16)	ND(0.041) J	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.041)	0.071	ND(0.82)	ND(0.82)	ND(0.82)
	OA1	outdoor air	7/02/09	0	150	25	110	0.18	0.48	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.04)	0.052	ND(0.81)	ND(0.81)	ND(0.81)
	OA2	outdoor air	5/08/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2	outdoor air	5/09/06	0	70.8	ND(24)	ND(28)	0.699	ND(0.524)	ND(0.442)	0.941	ND(0.548)	0.599	ND(0.688)	ND(5.82)	--	--	0.77	--	--
	OA2	outdoor air	5/10/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524) J	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2	outdoor air	5/11/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	0.831 J	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2 Dup	outdoor air	5/11/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	12.3 J	ND(0.442)	0.83	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2	outdoor air	5/12/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2	outdoor air	5/13/06	0	ND(24)	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2	outdoor air	5/15/06	0	ND(24)	ND(24)	ND(28)	ND(0.638) J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA2	outdoor air	5/16/06	0	36.8	ND(24)	ND(28)	ND(0.638)	ND(0.524)	ND(0.442)	ND(0.548) J	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82)	--	--	ND(0.434)	--	--
	OA2	outdoor air	9/18/06	0	47.2	49.8	95.6	ND(0.638) J	ND(0.524) J	ND(0.442) J	13.2 J	10.8 J	9.09 J	ND(0.688) J	ND(5.82) J	--	--	0.897 J	--	--
	OA2	outdoor air	9/19/06	0	ND(24)	ND(24)	ND(28)	0.969 J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA2	outdoor air	9/20/06	0	30.9	ND(24)	ND(28)	1.93 J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	0.5 J	--	--
	OA2 Dup	outdoor air	9/20/06	0	24.8 J	ND(24)	ND(28) J	2.59 J	ND(0.524) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	1.28 J	--	--
	OA2	outdoor air	9/21/06	0	34.8	ND(24)	ND(28)	1.91 J	ND(0.524) J	ND(0.442) J	0.887 J	1.2 J	0.916 J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	OA2	outdoor air	10/05/06	0	ND(24)	ND(24)	ND(28)	ND(0.638) J	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	OA2	outdoor air	10/06/06	0	ND(24)	ND(24)	ND(28)	1.18 J	ND(0.524)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	OA2	outdoor air	10/07/06	0	109	ND(24)	ND(28)	1.28 J	ND(0.524)	ND(0.442)	ND(0.548)	0.819	0.99	1.64	ND(5.82) J	--	--	ND(0.434)	--	--
	OA2	outdoor air	1/25/07	0	24.7	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	1.18	ND(5.82)	--	--	ND(0.868)	--	--
	OA2	outdoor air	1/26/07	0	44.2	ND(24)	29.6	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	OA2	outdoor air	4/23/08	0	ND(59)	ND(15)	ND(15)	0.48	ND(0.29)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	--	ND(0.037)	0.047	ND(0.74)	--	--
	OA2	outdoor air	5/06/08	0	ND(67)	ND(17)	ND(17)	0.27	ND(0.33)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.042)	0.061	ND(0.84)	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
Outdoor Air cont.	OA2	outdoor air	5/07/08	0	ND(64)	ND(16)	ND(16)	0.38	ND(0.32)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.04)	0.068	ND(0.8)	--	--
	OA2	outdoor air	5/08/08	0	ND(61)	ND(15)	ND(15)	0.26	ND(0.3)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.038)	0.067	ND(0.76)	--	--
	OA2	outdoor air	5/08/08	0	ND(62)	ND(16)	16	0.28	ND(0.31)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.07	ND(0.78)	--	--
	OA2	outdoor air	3/14/09	0	ND(43)	ND(11)	ND(22)	0.32	ND(0.054)	ND(0.22)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.054)	0.082 J	ND(1.1)	ND(1.1)	ND(1.1)
	OA2	outdoor air	3/15/09	0	ND(30)	ND(7.5)	ND(15)	0.31	0.31	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.038)	0.081 J	ND(0.75)	ND(0.75)	ND(0.75)
	OA2	outdoor air	3/16/09	0	ND(38)	ND(9.6)	ND(19)	0.4	ND(0.048)	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.048)	0.092 J	ND(0.96)	ND(0.96)	ND(0.96)
	OA2	outdoor air	3/17/09	0	ND(31)	ND(7.7)	ND(15)	0.44	ND(0.039)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.039)	0.08	ND(0.77)	ND(0.77)	ND(0.77)
	OA2	outdoor air	3/18/09	0	ND(33)	12	99	0.48	0.15	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.041)	0.083	ND(0.82)	ND(0.82)	ND(0.82)
	OA2	outdoor air	3/19/09	0	ND(31)	ND(7.7)	25	0.26	0.077	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.039)	0.075	ND(0.77)	ND(0.77)	ND(0.77)
	OA2	outdoor air	3/20/09	0	87	ND(9.5)	19	0.33	0.11	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.048)	0.081	ND(0.95)	ND(0.95)	ND(0.95)
	OA2	outdoor air	3/21/09	0	ND(28)	ND(7)	23	0.36	0.18	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.035)	0.075	ND(0.7)	ND(0.7)	ND(0.7)
	OA3	outdoor air	3/14/09	0	ND(31)	ND(7.8)	ND(16)	0.29	ND(0.039)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.081 J	ND(0.78)	ND(0.78)	ND(0.78)
	OA3	outdoor air	3/15/09	0	ND(32)	ND(7.9)	ND(16)	0.3	ND(0.04)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.04)	0.078 J	ND(0.79)	ND(0.79)	ND(0.79)
	OA3	outdoor air	3/16/09	0	150	ND(9.7)	ND(19)	0.81	0.12	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	3.8	1.1	ND(0.049)	0.14 J	ND(0.97)	ND(0.97)	6.5
	OA3	outdoor air	3/17/09	0	47	ND(8.7)	ND(17)	0.58	0.058	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	1	1.2	ND(0.043)	0.084	ND(0.87)	ND(0.87)	2.3
	OA3	outdoor air	3/18/09	0	ND(27)	ND(6.9)	ND(14)	0.39	ND(0.034)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.034)	0.09	ND(0.69)	ND(0.69)	ND(0.69)
	OA3	outdoor air	3/19/09	0	ND(34)	ND(8.5)	26	0.27	0.11	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	0.92	ND(0.042)	0.075	ND(0.85)	ND(0.85)	ND(0.85)
	OA3	outdoor air	3/20/09	0	55	ND(9.6)	ND(19)	ND(0.19)	0.07	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.048)	0.077	ND(0.96)	ND(0.96)	ND(0.96)
	OA3	outdoor air	3/21/09	0	ND(31)	ND(7.8)	ND(16)	0.33	0.061	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.069	ND(0.78)	ND(0.78)	ND(0.78)
	OA4	outdoor air	1/23/10	0	ND(31)	ND(7.7)	ND(15)	0.71	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.038)	0.062	ND(0.77)	ND(0.77)	ND(0.77)
	OA4	outdoor air	1/24/10	0	ND(32)	ND(7.9)	ND(16)	0.62	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.04)	0.055	ND(0.79)	ND(0.79)	ND(0.79)
	OA4	outdoor air	1/25/10	0	ND(24)	ND(6)	ND(12)	0.51	ND(0.12)	ND(0.12)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.03)	0.057	ND(0.6)	ND(0.6)	ND(0.6)
	OA4	outdoor air	1/26/10	0	29	ND(7.2)	ND(14)	0.74	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.036)	0.062	ND(0.72)	ND(0.72)	ND(0.72)
	OA4	outdoor air	1/27/10	0	36	ND(7.5)	ND(15)	0.77	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	0.77	ND(0.75)	ND(0.038)	0.058	ND(0.75)	ND(0.75)	1.2
	OA4	outdoor air	1/28/10	0	37	ND(8.9)	ND(18)	0.72 J	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.045)	0.061	ND(0.89)	ND(0.89)	ND(0.89)
	OA4	outdoor air	1/30/10	0	ND(28)	ND(7)	ND(14)	0.64	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.035)	0.085	ND(0.7)	ND(0.7)	ND(0.7)
	OA4	outdoor air	2/01/10	0	ND(35)	ND(8.9)	ND(18)	0.55	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.044)	0.085	ND(0.89)	ND(0.89)	ND(0.89)
SI 01	SI1-IA	indoor air	3/18/09	0	210	18	74	3.2	0.43	0.6	ND(0.85)	ND(0.85)	ND(0.85)	2.8	4.1	ND(0.14)	0.4	2	1.4	5.5
	SI1-IA	indoor air	1/28/10	0	95	ND(8.9)	ND(18)	1.8	ND(0.18)	1	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.045)	0.36	ND(0.89)	ND(0.89)	1
	SI1-GA	garage air	3/18/09	0	330	19	39	7.8	0.39	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	3.5	2.8	ND(0.038)	0.14	3.7	1.8	6.6
	SI1-GA	garage air	1/28/10	0	200	10	ND(13)	6.5	0.18	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	2	ND(0.64)	ND(0.032)	0.11	3.1	1	3.1
	SI1-CS	crawlspace	3/18/09	0	230	13	44	4.3	0.29	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	2.7	2.7	ND(0.042)	0.16	2	1	5.3
	SI1-CS	crawlspace	1/28/10	0	48	ND(8.4)	ND(17)	0.81	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.042)	0.1	ND(0.84)	ND(0.84)	ND(0.84)
	SINS1	near slab	5/09/06	4.5	2780	ND(48)	118	10	ND(5.24)	ND(0.884)	ND(1.1)	ND(1.1)	ND(1.1)	19.3	ND(11.6)	--	--	3.3	--	--
	SINS1	near slab	9/20/06	4.5	380	ND(240)	ND(280)	ND(16) J	ND(26.2) J	ND(4.42) J	ND(5.48) J	ND(5.48) J	ND(5.48) J	ND(6.88) J	ND(58.2) J	--	--	ND(4.34) J	--	--
	SINS1 Dup	near slab	9/20/06	4.5	359	ND(240)	ND(280)	ND(16) J	ND(26.2) J	ND(4.42) J	ND(5.48) J	ND(5.48) J	ND(5.48) J	ND(6.88) J	ND(58.2) J	--	--	ND(4.34) J	--	--
SI 02	SIIA2	indoor air	1/26/07	0	69.5	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	SIIA2	indoor air	4/23/08	0	ND(72)	ND(18)	21	0.75	ND(0.36)	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	--	ND(0.045)	0.19	ND(0.9)	--	--
	SICS2	crawlspace	1/26/07	0	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	9.01 J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	SICS2 Dup	crawlspace	1/26/07	0	26.3	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	SICS2	crawlspace	4/23/08	0	ND(71)	ND(18)	ND(18)	0.31	ND(0.35)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	--	ND(0.044)	0.054	ND(0.89)	--	--
	SINS2	near slab	5/12/06	6.5	2230000	ND(35800) J	106000	2930	ND(3910) J	ND(660) J	ND(819) J	ND(819) J	ND(819) J	58400	ND(8690) J	--	--	3680	--	--
	SINS2	near slab	5/12/06	11.5	18600000	ND(91600) J	110000	41300	ND(10000)	5230 R	ND(2090)	ND(2090)	ND(2090)	595000	ND(22200)	--	--	7430	--	--
	SINS2	near slab	5/12/06	16.5	8850000	ND(92000) J	ND(107000) J	19900	ND(10000) J	2110 R	ND(2100) J	ND(2100) J	ND(2100) J	157000	ND(22300) J	--	--	2920	--	--
	SINS2	near slab	10/06/06	6.5	33200	ND(600)	14900	ND(39.9) J	ND(65.5) J	11.2 R	ND(13.7) J	ND(13.7) J	ND(13.7) J	731 J	ND(146) J	--	--	ND(10.8) J	--	--
	SINS2	near slab	10/06/06	11.5	897000 J	ND(23800)	ND(27700)	3770 J	ND(2590) J	848 R	ND(543) J	ND(543) J	ND(543) J	35100 J	ND(5760) J	--	--	1360 J	--	--
	SINS2	near slab	10/06/06	16.5	31800	6580	165000	83.8 J	ND(40) J	71.6 R	ND(8.38) J	ND(8.38) J	ND(8.38) J	99.7 J	ND(88.9) J	--	--	89.5 J	--	--
	SINS2 Dup	near slab	10/06/06	11.5	10400 J	ND(240)	ND(280)	34 J	ND(26.2)	4.54 R	ND(5.48)	ND(5.48)	ND(5.48)	364 J	ND(58.2) J	--	--	10.3 J	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 02 cont.	SINS2	near slab	1/26/07	6.5	106000	516	94200	ND(1.6)	23.9	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	14.3	ND(5.82)	--	--	ND(0.868)	--	--
	SINS2	near slab	1/26/07	11.5	207000 R	ND(240) R	5320 R	2650 R	ND(26.2) R	1210 R	ND(27.4) R	ND(27.4) R	ND(27.4) R	7450 R	ND(146) R	--	--	89.8 R	--	--
	SINS2	near slab	1/26/07	16.5	4660000 J	ND(14400)	ND(16800)	1760 J	714 J	ND(263)	ND(653) J	ND(653) J	ND(653) J	24800 J	ND(3460)	--	--	ND(516)	--	--
	SINS2 Dup	near slab	1/26/07	16.5	31900000 J	ND(38400)	ND(44800)	23700 J	ND(1640) J	ND(690)	ND(1710) J	ND(1710) J	ND(1710) J	214000 J	ND(9090)	--	--	ND(1360)	--	--
	SINS2	near slab	6/06/07	6.5	7700 J	ND(480) J	15900 J	ND(6.38)	ND(4.19)	ND(1.77)	ND(4.39)	ND(4.39)	ND(4.39)	10.3 J	156 J	--	--	ND(3.47)	--	--
	SINS2	near slab	5/05/08	6.5	700	ND(54)	9900	ND(2.7)	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	63	ND(2.7)	ND(2.7)	ND(2.7)	--	--
	SIOAH2	outdoor air	1/26/07	0	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	SIOAH2	outdoor air	4/23/08	0	ND(74)	ND(18)	ND(18)	0.3	ND(0.37)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	--	ND(0.046)	ND(0.046)	ND(0.92)	--	--
SI 03	SIIA3U1	indoor air	7/24/08	0	71	26	71	0.51	0.35 J	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	1.3	2.4	ND(0.043)	0.29	2.5	--	--
	SIIA3U2	indoor air	7/24/08	0	ND(74)	ND(18)	94	0.35	0.44 J	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	1.2	2.9	ND(0.046)	0.27	2.5	--	--
	SIIA3U2 Dup	indoor air	7/24/08	0	69	18	110	0.4	0.39 J	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	1.2	3.3	ND(0.041)	0.29	2.5	--	--
	SIIA3B1	indoor air	7/24/08	0	82	ND(19)	45	0.39	ND(0.37) J	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	1.8	1.9	ND(0.047)	0.3	4.3	--	--
	SIIA3B2	indoor air	7/24/08	0	120	20	61	0.54	0.93 J	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	2.4	1.9	ND(0.038)	0.38	5.8	--	--
	SIIA3	indoor air	5/06/08	0	340	ND(20)	92 J	0.43	ND(0.41)	0.21	ND(1)	ND(1)	ND(1)	4.2	2	ND(0.051)	0.16	6.3	--	--
	SIIA3 Dup	indoor air	5/06/08	0	280	33	120 J	0.49	0.44	0.18	ND(0.91)	ND(0.91)	ND(0.91)	4.4	2.2	ND(0.046)	0.18	6.4	--	--
	SI3-IA1	indoor air	3/15/09	0	4100	ND(25)	ND(50)	0.6	0.33	1.2	ND(2.5)	ND(2.5)	ND(2.5)	67	ND(2.5)	ND(0.13)	1 J	ND(2.5)	ND(2.5)	24
	SI3-IA1	indoor air	6/03/09	0	ND(34)	ND(8.5)	ND(17)	0.32	0.19 J	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.085)	0.13	ND(0.85)	ND(0.85)	ND(0.85)
	SI3-IA1	indoor air	7/02/09	0	45	ND(9.8)	22	0.21	0.43	ND(0.2)	ND(0.98)	ND(0.98)	ND(0.98)	ND(0.98)	ND(0.98)	ND(0.07)	0.074	2.4	ND(0.98)	ND(0.98)
	SI3-IA1	indoor air	1/25/10	0	74	ND(8.9)	34	1.3	0.44	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	1	1.7	0.049	0.2	2.8	ND(0.89)	2.7
	SI3-IA1	indoor air	9/25/10	0	100	ND(8.5)	32	0.22	0.2	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.5	ND(0.042)	0.053	4.3	ND(0.85)	1.1
	SI3-IA1	indoor air	12/03/10	0	160	ND(8.5)	35	0.82	0.4	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	1.3	1.3	ND(0.043)	0.48	3.6	ND(0.85)	5.2
	SI3-IA1	indoor air	4/12/11	0	62	ND(8.6)	32	0.53	0.24 J	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	1.3	0.051	0.13	2.8	ND(0.86)	3.2
	SI3-IA1 Dup	indoor air	2/09/12	0	65	ND(9.4)	23	0.78	ND(0.19)	ND(0.37)	ND(0.94)	ND(0.94)	ND(0.94)	ND(1.9)	ND(0.94)	ND(0.047)	0.23	2.3	ND(0.94)	7.1
	SI3-IA1	indoor air	2/09/12	0	68	ND(9.1)	ND(18)	0.78	ND(0.18)	ND(0.36)	ND(0.91)	ND(0.91)	ND(0.91)	ND(1.8)	ND(0.91)	ND(0.046)	0.24	2.4	ND(0.91)	6.9
	SI3-IA2	indoor air	3/15/09	0	2700	ND(28)	ND(56)	0.84	0.32	0.77	ND(2.8)	ND(2.8)	ND(2.8)	44	ND(2.8)	ND(0.14)	0.82 J	ND(2.8)	ND(2.8)	18
	SI3-IA2	indoor air	6/03/09	0	63	ND(7.2)	27	0.28	0.27 J	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	1.2	ND(0.72)	ND(0.072)	0.11	ND(0.72)	ND(0.72)	ND(0.72)
	SI3-IA2	indoor air	7/02/09	0	67	ND(7.6)	44	0.23	0.42	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	1.2	ND(0.054)	0.1	2.6	ND(0.76)	ND(0.76)
	SI3-IA2	indoor air	9/25/10	0	86	ND(8.3)	44	0.24	0.23	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	3.7	ND(0.041)	0.062	2.5	ND(0.83)	4.6
	SI3-IA2	indoor air	12/03/10	0	180	ND(12)	37	0.85	0.53	ND(0.25)	ND(1.2)	ND(1.2)	ND(1.2)	1.4	1.3	ND(0.062)	0.61	3.1	ND(1.2)	6
	SI3-IA2	indoor air	2/09/12	0	76	ND(8.8)	ND(18)	1.4	ND(0.18)	ND(0.35)	ND(0.88)	ND(0.88)	ND(0.88)	ND(1.8)	ND(0.88)	ND(0.044)	0.13	3.9	ND(0.88)	4.5
	SIG3	garage air	5/06/08	0	ND(85)	ND(21)	ND(21)	0.23	ND(0.42)	ND(0.21)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.053)	0.057	ND(1.1)	--	--
	SIG3	garage air	7/24/08	0	ND(68)	ND(17)	ND(17)	0.19	0.55 J	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.1	ND(0.043)	0.047	1.2	--	--
	SI3-GA	garage air	3/15/09	0	ND(36)	ND(8.9)	20	0.38	0.93	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.045)	0.083 J	ND(0.89)	ND(0.89)	ND(0.89)
	SI3-GA	garage air	6/03/09	0	ND(390)	ND(99)	ND(200)	11	0.58 J	ND(2)	ND(9.9)	ND(9.9)	ND(9.9)	ND(9.9)	ND(9.9)	ND(0.23)	ND(0.23)	ND(9.9)	ND(9.9)	ND(9.9)
	SI3-GA	garage air	7/02/09	0	81	16	45	0.21	0.54	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.15)	ND(0.15)	38	0.89	ND(0.89)
	SI3-GA	garage air	1/25/10	0	38	ND(8.2)	ND(16)	2.3	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.041)	0.072	1	ND(0.82)	ND(0.82)
	SI3-GA	garage air	9/25/10	0	ND(26)	ND(6.4)	ND(13)	0.15	0.16	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.032)	ND(0.032)	ND(0.64)	ND(0.64)	ND(0.64)
	SI3-GA	garage air	12/03/10	0	130	ND(7.5)	ND(15)	1.9	0.23	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	0.79	ND(0.75)	ND(0.037)	0.088	0.96	ND(0.75)	1.3
	SI3-GA	garage air	4/12/11	0	90	9.3	21	3.1	0.33 J	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.099	2.1	0.79	2
	SI3-GA	garage air	2/09/12	0	ND(31)	ND(7.7)	ND(15)	0.57	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.77)	ND(0.77)	ND(1.5)	ND(0.77)	ND(0.038)	0.057	ND(0.77)	ND(0.77)	ND(0.77)
	SISS3-1	sub slab	5/05/08	0	ND(210) R	ND(52) R	ND(52) R	ND(2.6) R	ND(2.6) R	ND(0.52) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	--	--
	SISS3-1 Dup	sub slab	5/05/08	0	420 R	ND(53) R	160 R	ND(2.6) R	ND(2.6) R	ND(0.53) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	7.7 R	ND(2.6) R	ND(2.6) R	ND(2.6) R	3.6 R	--	--
	SISS3-2	sub slab	5/05/08	0	750	ND(52)	55	ND(2.6)	ND(2.6)	ND(0.52)	ND(2.6)	ND(2.6)	ND(2.6)	13	4.1	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SISS3-3	sub slab	5/05/08	0	ND(220)	ND(55)	180	ND(2.8)	ND(2.8)	ND(0.55)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	6.5	ND(2.8)	ND(2.8)	ND(2.8)	--	--
	SISS3-4	sub slab	7/23/08	0	ND(190)	ND(49)	98	ND(2.4)	ND(2.4)	ND(0.49)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	4.1	ND(2.4)	ND(2.4) J	ND(2.4)	--	--
	SISS3-5	sub slab	7/23/08	0	ND(220)	ND(54)	ND(54)	ND(2.7)	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7) J	ND(2.7)	--	--
	SI3-SS1	sub slab	3/16/09	0	13000	ND(31)	240	ND(0.61)	ND(1.2)	ND(0.61)	ND(0.61)	ND(3.1)	ND(0.61)	25	ND(3.1)	ND(0.61)	ND(0.61)	3.7	ND(3.1)	ND(3.1)
	SI3-SS1	sub slab	6/02/09	0	59	ND(9.1)	47	0.83	ND(0.36) J	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	1.4	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.91)	0.96
	SI3-SS1	sub slab	7/02/09	0	87	ND(8.5)	25	0.93	1	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.1	ND(0.17)	0.2	2.3	ND(0.85)	ND(0.85)
	SI3-SS1	sub slab	1/26/10	0	55	ND(8.2)	24	0.82	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.1	ND(0.16)	ND(0.16)	1.6	ND(0.82)	1.9
	SI3-SS1	sub slab	9/25/10	0	180	ND(9.8)	47	0.33	ND(0.2)	ND(0.2)	ND(0.98)	ND(0.98)	ND(0.98)	2.2	2.3	ND(0.049)	0.08	2	ND(0.98)	6.9
	SI3-SS1	sub slab	12/02/10	0	280	ND(8.2)	160	0.78	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	3.3	7.2	ND(0.16)	0.36	2.2	ND(0.82)	7.9
	SI3-SS1	sub slab	4/11/11	0	57	ND(8.5)	19	0.22	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)
	SI3-SS1	sub slab	2/09/12	0	73	ND(8.4)	30	0.75	ND(0.17)	ND(0.33)	ND(0.84)	ND(0.84)	ND(0.84)	ND(1.7)	ND(0.84)	ND(0.042)	0.18	1.5	ND(0.84)	5.1
	SI3-SS2	sub slab	3/16/09	0	5500	ND(29)	ND(58)	1.4	ND(1.2)	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	58	ND(2.9)	ND(0.58)	ND(0.58)	ND(2.9)	ND(2.9)	ND(2.9)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 03 cont.	SI3-SS2	sub slab	6/02/09	0	ND(35)	ND(8.7)	23	0.75	1.5 J	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)
	SI3-SS2	sub slab	7/02/09	0	34	45	440	0.9	2.9 J	ND(0.16)	0.93 J	ND(0.81)	ND(0.81)	ND(0.81)	1.5	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)
	SI3-SS2	sub slab	1/26/10	0	68	10	77	0.4	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.1	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SI3-SS2	sub slab	9/25/10	0	740	14	44	0.38	0.45	0.17	ND(0.79)	ND(0.79)	ND(0.79)	16	0.89	ND(0.04)	0.2	ND(0.79)	ND(0.79)	22
	SI3-SS2	sub slab	12/02/10	0	220	ND(9.5)	ND(19)	0.24	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	5.9	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)
	SI3-SS2	sub slab	4/11/11	0	3700	ND(24)	ND(48)	0.55	ND(2.4)	2.1	ND(2.4)	ND(2.4)	ND(2.4)	25	ND(2.4)	ND(0.48)	ND(0.48)	3.2	ND(2.4)	56
	SI3-SS2	sub slab	2/09/12	0	61	ND(7.9)	19	0.6	ND(0.16)	ND(0.32)	ND(0.79)	ND(0.79)	ND(0.79)	1.7	ND(0.79)	ND(0.04)	0.11	1.1	ND(0.79)	1.6
	SINS3	near slab	5/12/06	6.5	41400	2560	18000	52.4	ND(65.5) J	ND(11) J	ND(13.7) J	15.7	24.1	284	ND(146) J	--	--	88.6	--	--
	SINS3	near slab	5/12/06	11.5	9600 J	90.7 J	969 J	16.8 J	ND(5.24) J	ND(0.884) J	ND(1.1) J	ND(1.1) J	1.11 J	59.1 J	45.1 J	--	--	13.9 J	--	--
	SINS3	near slab	10/05/06	6.5	54.8	ND(24)	58.2	1.78 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS3	near slab	10/05/06	11.5	3170	859	29200	7.15 J	ND(2.62) J	0.587 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	66 J	ND(5.82) J	--	--	16.2 J	--	--
	SINS3	near slab	5/05/08	6.5	700	ND(51)	280	ND(2.6)	ND(2.6)	ND(0.51)	ND(2.6)	ND(2.6)	ND(2.6)	12	2.6	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SINS3	near slab	5/05/08	11.5	32000000	ND(420000)	ND(420000)	31000	ND(21000)	5500	ND(21000)	ND(21000)	ND(21000)	590000	ND(21000)	ND(21000)	ND(21000)	ND(21000)	--	--
	SIOAH3	outdoor air	5/06/08	0	ND(74)	ND(18)	21	0.24	ND(0.37)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.046)	0.073	ND(0.92)	--	--
	SIOAH3	outdoor air	7/24/08	0	ND(62)	ND(15)	ND(15)	0.16	ND(0.31)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.039)	0.044	ND(0.77)	--	--
	SIOAH3	outdoor air	9/25/10	0	ND(34)	ND(8.5)	ND(17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.043)	ND(0.043)	ND(0.85)	ND(0.85)	ND(0.85)
	SIOAH3	outdoor air	12/03/10	0	36	ND(8.2)	ND(16)	0.6	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.041)	0.074	ND(0.82)	ND(0.82)	ND(0.82)
	SIOAH3	outdoor air	4/12/11	0	ND(36)	ND(9)	ND(18)	0.32	ND(0.18) J	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.045)	0.056	ND(0.9)	ND(0.9)	ND(0.9)
	SI3-NS	near slab	3/19/09	6.5	ND(30)	ND(7.5)	ND(15)	ND(0.15)	ND(0.3)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
	SI3-NS	near slab	3/19/09	11.5	32000000	ND(350000)	ND(710000)	47000	ND(14000)	27000 J	ND(35000)	ND(35000)	ND(35000)	730000	ND(35000)	ND(7100)	ND(7100)	ND(35000)	ND(35000)	1300000
	SI3-NS Dup	near slab	3/19/09	11.5	32000000	ND(360000)	ND(720000)	41000	ND(14000)	35000 J	ND(36000)	ND(36000)	ND(36000)	680000	ND(36000)	ND(7200)	ND(7200)	ND(36000)	ND(36000)	1100000
	SI3-NS	near slab	9/24/10	6.5	1000000	ND(4300)	ND(8500)	ND(85)	ND(430)	200	ND(430)	ND(430)	ND(430)	23000	ND(430)	ND(85)	ND(85)	ND(430)	ND(430)	ND(430)
	SI3-NS	near slab	9/24/10	11.5	39000000	ND(400000)	ND(800000)	19000	ND(40000)	13000	ND(40000)	ND(40000)	ND(40000)	840000	ND(40000)	ND(8000)	ND(8000)	ND(40000)	ND(40000)	1500000
	SI3-NS	near slab	12/02/10	6.5	140	ND(22)	ND(43)	ND(0.43)	ND(2.2)	ND(0.43)	ND(2.2)	ND(2.2)	ND(2.2)	2.4	ND(2.2)	ND(0.43)	ND(0.43)	ND(2.2)	ND(2.2)	5.2
	SI3-NS	near slab	12/02/10	11.5	82000000	ND(160000)	ND(320000)	32000	ND(16000)	37000	ND(16000)	ND(16000)	ND(16000)	1700000	ND(16000)	ND(3200)	ND(3200)	16000	ND(16000)	2800000
	SI3-NS	near slab	4/11/11	6.5	ND(81)	ND(20)	ND(41)	ND(0.41)	ND(2)	ND(0.41)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(0.41)	ND(0.41)	ND(2)	ND(2)	ND(2)
	SI3-NS	near slab	4/11/11	11.5	37000000	ND(280000)	ND(560000)	14000	ND(28000)	21000	ND(28000)	ND(28000)	ND(28000)	840000	ND(28000)	ND(5600)	ND(5600)	ND(28000)	ND(28000)	1600000
	SI3-NS	near slab	2/08/12	6.5	ND(84)	ND(21)	ND(42)	ND(0.42)	2.1	ND(0.84)	ND(2.1)	ND(2.1)	ND(2.1)	ND(4.2)	ND(2.1)	ND(0.42)	ND(0.42)	ND(2.1)	ND(2.1)	ND(2.1)
	SI3-NS	near slab	2/08/12	11.5	66000000	ND(560000)	1300000	40000	ND(56000)	ND(22000)	ND(56000)	ND(56000)	ND(56000)	1900000	ND(56000)	ND(11000)	ND(11000)	ND(56000)	ND(56000)	3700000
	SI3-FF	indoor air	1/25/10	0	84	ND(9.5)	35	1.2	0.32	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	1.6	ND(0.048)	0.14	2.9	ND(0.95)	2.6
SI 04	SIIA4	indoor air	4/23/08	0	640	34	110	17	0.78	ND(0.14)	ND(0.68)	ND(0.68)	ND(0.68)	3.9	--	ND(0.068)	0.5	4.8	--	--
	SIIA4	indoor air	5/21/08	0	ND(86)	ND(22)	52	0.56	0.75	ND(0.22)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	1.5	ND(0.054)	0.47	ND(1.1)	--	--
	SI4-IA	indoor air	3/15/09	0	91 J	9.1	130 J	0.51 J	0.83 J	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.3	ND(0.041)	0.6 J	ND(0.82)	ND(0.82)	ND(0.82)
	SI4-IA Dup	indoor air	3/15/09	0	120 J	10	83 J	0.66 J	0.62 J	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	1.6	ND(0.043)	0.57 J	ND(0.86)	ND(0.86)	ND(0.86)
	SI4-IA	indoor air	1/23/10	0	77	10	56	1.2	0.64	0.19	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.1	ND(0.043)	4.2	ND(0.85)	ND(0.85)	0.96
	SIG4	garage air	4/23/08	0	7700	320	430	260	4.6	ND(0.84)	ND(4.2)	ND(4.2)	ND(4.2)	49	--	ND(0.42)	1.3	81	--	--
	SIG4	garage air	5/21/08	0	190	66	760	5.5	2.1	0.63	1.3	ND(0.89)	ND(0.89)	2.8	30	ND(0.044)	0.34	4.2	--	--
	SI4-GA	garage air	3/15/09	0	98	28	110	1.2	1.1	ND(0.17)	0.91	ND(0.86)	ND(0.86)	2.1	9	0.053	0.19 J	1.8	1.5	4.1
	SI4-GA	garage air	1/23/10	0	41	31	56	1.8	1	ND(0.17)	0.87 J	ND(0.84)	ND(0.84)	ND(0.84)	5.4	ND(0.042)	0.81	2.5	2.2	1.6
	SISS4-1	sub slab	4/23/08	0	250	ND(57)	200	4.7	ND(2.8)	ND(0.57)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	--	ND(2.8)	ND(2.8)	3.4	--	--
	SISS4-2	sub slab	4/23/08	0	ND(190)	ND(48)	120	ND(2.4)	ND(2.4)	ND(0.48)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	--	ND(2.4)	ND(2.4)	ND(2.4)	--	--
	SI4-SS1	sub slab	3/15/09	0	220	ND(7.6)	47	0.69	ND(0.3)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.15)	0.86	ND(0.76)	ND(0.76)
	SI4-SS1	sub slab	1/24/10	0	39	ND(7.7)	25	0.54	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	0.88	ND(0.77)	ND(0.77)
	SI4-SS2	sub slab	3/15/09	0	400	ND(7.1)	48	1.2	0.56	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.14)	1.3	ND(0.71)	ND(0.71)
	SI4-SS2	sub slab	1/24/10	0	ND(31)	ND(7.9)	ND(16)	0.93	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SINS4	near slab	5/16/06	6.3	8740	56	796	23.9	ND(5.24)	33.7 R	1.74	2.75	4.04	13.9	ND(11.6)	--	--	4.5	--	--
	SINS4	near slab	5/16/06	11.3	14500	51.8	949	10.8	ND(5.24)	104 R	1.98	ND(1.1)	1.44	40.5	ND(11.6)	--	--	4.58	--	--
	SINS4	near slab	5/16/06	16.3	5180	57.5	341	11.4	ND(5.24)	37.6 R	2.96	4.85	6.98	22	ND(11.6)	--	--	7.32	--	--
	SINS4	near slab	5/16/06	21.3	62100	ND(600)	731	ND(39.9) J	ND(65.5) J	2400 R	ND(13.7) J	ND(13.7) J	ND(13.7) J	97	ND(146) J	--	--	ND(10.8) J	--	--
	SINS4 Dup	near slab	5/16/06	16.3	7130	52	477	20.5	ND(5.24) J	60.3 R	2.31	3.96	5.58	38.5	ND(11.6)	--	--	11.6	--	--
	SINS4	near slab	10/06/06	6.3	809	ND(24)	275	3.47 J	ND(2.62) J	0.492 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	7.03 J	ND(5.82) J	--	--	2.94 J	--	--
	SINS4	near slab	10/06/06	11.3	299	ND(24)	252	1.74 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	1.13 J	ND(5.82) J	--	--	0.593 J	--	--
	SINS4	near slab	10/06/06	16.3	1600	ND(24)	414	4.41 J	ND(2.62) J	1.12 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	22.4 J	ND(5.82) J	--	--	2.71 J	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 04 cont.	SINS4	near slab	10/06/06	21.3	198000	ND(1200)	20800	251 J	136 J	1090 R	ND(27.4) J	ND(27.4) J	ND(27.4) J	1640 J	386 J	--	--	66.7 J	--	--
	SINS4	near slab	5/05/08	6.3	920	ND(59)	260	ND(2.9)	ND(2.9)	ND(0.59)	ND(2.9)	ND(2.9)	ND(2.9)	7.8	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	--	--
	SINS4	near slab	5/05/08	11.3	730	ND(62)	460	ND(3.1)	ND(3.1)	2.4	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	5.3	ND(3.1)	ND(3.1)	ND(3.1)	--	--
	SINS4	near slab	5/05/08	16.3	3100	ND(96)	950	7.3	ND(4.8)	2.8	ND(4.8)	ND(4.8)	ND(4.8)	4.9	7.5	ND(4.8)	ND(4.8)	ND(4.8)	--	--
	SINS4	near slab	5/05/08	21.3	16000	ND(190)	1600	10	ND(9.7)	370	ND(9.7)	ND(9.7)	ND(9.7)	ND(9.7)	12	ND(9.7)	ND(9.7)	ND(9.7)	--	--
	SIOAH4	outdoor air	4/23/08	0	ND(62)	ND(15)	ND(15)	0.28	ND(0.31)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	--	ND(0.039)	0.047	ND(0.77)	--	--
	SIOAH4	outdoor air	5/21/08	0	ND(72)	ND(18)	27	ND(0.18)	ND(0.36)	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.045)	0.069	ND(0.9)	--	--
SI 05	SIIA5	indoor air	1/26/07	0	63.9	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	9.11 J	ND(1.1) J	3.14 J	1.43	ND(5.82)	--	--	ND(0.868)	--	--
	SIIA5	indoor air	4/24/08	0	ND(61)	ND(15)	ND(15)	0.27	ND(0.31)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	--	ND(0.038)	0.05	ND(0.77)	--	--
	SIG5	garage air	4/23/08	0	ND(61)	ND(15)	ND(15)	0.28	ND(0.31)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	--	ND(0.038)	0.049	ND(0.77)	--	--
	SICS5	crawlspace	1/26/07	0	29.8	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	1.45	ND(5.82)	--	--	ND(0.868)	--	--
	SICS5	crawlspace	4/24/08	0	ND(74)	ND(19)	ND(19)	0.28	ND(0.37)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	--	ND(0.047)	ND(0.047)	ND(0.93)	--	--
	SINS5	near slab	5/12/06	4.3	1930000	104000	547000	7160	ND(1890) J	ND(319) J	ND(396) J	ND(396) J	ND(396) J	56200	10400	--	--	4100	--	--
	SINS5	near slab	5/12/06	9	2140000	ND(94500) J	ND(110000) J	1190 J	ND(824) J	ND(139) J	ND(173) J	ND(173) J	ND(173) J	10400 J	ND(1830) J	--	--	1200 J	--	--
	SINS5	near slab	10/06/06	4.3	689	118	3330	1.91 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	1.64 J	ND(5.82) J	--	--	1.33 J	--	--
	SINS5	near slab	10/06/06	9	792	128	7720	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	1.84 J	ND(5.82) J	--	--	4.23 J	--	--
	SINS5	near slab	1/26/07	4.3	884	97.4	1950	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	13	ND(5.82)	--	--	1.08	--	--
	SINS5	near slab	1/26/07	9	495 R	55 R	4510 R	ND(1.6) R	ND(1.05) R	ND(0.442) R	ND(1.1) R	ND(1.1) R	ND(1.1) R	0.739 R	ND(5.82) R	--	--	ND(0.868) R	--	--
	SINS5	near slab	6/06/07	9	ND(48)	ND(48)	252 J	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	SINS5	near slab	5/06/08	4.3	1700	ND(50)	ND(50) J	ND(2.5)	ND(2.5)	1.2	ND(2.5)	ND(2.5)	ND(2.5)	64	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	--
	SINS5	near slab	5/06/08	9	ND(210)	ND(51)	ND(51) J	ND(2.6)	ND(2.6)	ND(0.51)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SINS5 Dup	near slab	5/06/08	9	ND(210)	ND(52)	380 J	ND(2.6)	ND(2.6)	ND(0.52)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SIOAH5	outdoor air	1/26/07	0	27	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	0.853	ND(5.82)	--	--	ND(0.868)	--	--
	SIOAH5	outdoor air	4/24/08	0	ND(72)	ND(18)	ND(18)	0.28	ND(0.36)	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	--	ND(0.045)	0.046	ND(0.9)	--	--
SI 06	SI6-IA	indoor air	3/18/09	0	150	15	43	6.3	0.95 J	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	3.1	ND(0.043)	1.1	3.3	1.5	4.7
	SI6-IA Dup	indoor air	3/18/09	0	170	16	45	6.9	0.64 J	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	0.99	3.6	ND(0.043)	1.1	3.6	1.6	5.2
	SI6-SS1	sub slab	3/18/09	0	44	ND(6.9)	36	3.7	ND(0.27)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	0.7	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)
	SI6-SS2	sub slab	3/18/09	0	ND(27)	ND(6.7)	ND(13)	0.25	ND(0.27)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)
	SINS6	near slab	5/12/06	4.5	954	ND(24)	92	11.3	ND(2.62) J	4.55 R	ND(0.548) J	ND(0.548)	ND(0.548)	7.1	ND(5.82)	--	--	1.21	--	--
	SINS6	near slab	5/12/06	8.5	542	ND(24)	88.2	2.48	ND(2.62) J	ND(0.442)	ND(0.548) J	1.52	2.41	7.51	ND(5.82)	--	--	1.77	--	--
	SINS6	near slab	10/06/06	4.5	28.6	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	0.677 J	--	--
	SINS6	near slab	10/06/06	8.5	776	ND(24)	510	2.19 J	ND(2.62) J	0.834 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	10 J	16.4 J	--	--	0.636 J	--	--
SI 07	SI7-IA	indoor air	3/21/09	0	140	11	22	4	0.6	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	2	1	ND(0.037)	1.9	2.3	ND(0.75)	3
	SI7-IA	indoor air	1/23/10	0	ND(39)	ND(9.7)	ND(19)	0.75	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.049)	0.56	ND(0.97)	ND(0.97)	ND(0.97)
	SI7-GA	garage air	3/21/09	0	250	20	21	10	0.77	ND(0.21)	ND(1)	ND(1)	ND(1)	4.7	1.3	ND(0.052)	0.2	4.7	1.6	6.8
	SI7-GA	garage air	1/23/10	0	ND(32)	ND(8.1)	ND(16)	0.72	0.17	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.04)	0.068	ND(0.81)	ND(0.81)	0.82
	SI7-SS1	sub slab	3/22/09	0	46	ND(7.1)	25	1.2	0.34	0.17	ND(0.71)	ND(0.71)	ND(0.71)	0.79	ND(0.71)	ND(0.14)	ND(0.14)	0.79	ND(0.71)	1.3
	SI7-SS1	sub slab	1/24/10	0	74	11	110	2.5	0.94	0.19	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	1.9	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.84)	1
	SI7-SS2	sub slab	3/22/09	0	38	ND(6.7)	ND(13)	1.1	ND(0.27)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)	1	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.67)	1.2
	SI7-SS2	sub slab	1/24/10	0	ND(30)	ND(7.5)	ND(15)	1	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
	SINS7	near slab	5/12/06	4.3	1300	ND(48)	ND(56)	7.04	ND(5.24) J	ND(0.884)	ND(1.1)	ND(1.1)	ND(1.1)	22.5	ND(11.6)	--	--	0.906	--	--
	SINS7	near slab	5/12/06	9.3	1920	ND(48)	81.1	7.12	ND(5.24) J	3.72 R	ND(1.1)	ND(1.1)	ND(1.1)	31.5	ND(11.6)	--	--	2.56	--	--
	SINS7	near slab	10/05/06	4.3	32.4	ND(24)	39	1.74 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS7	near slab	10/05/06	9.3	51.4	ND(24)	47.8	2.26 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 08	SI8-IA	indoor air	3/17/09	0	130	ND(8.2)	98	0.55	0.28	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1	ND(0.041)	0.3	ND(0.82)	ND(0.82)	2.9
	SI8-IA	indoor air	1/25/10	0	ND(30)	ND(7.5)	ND(15)	0.47	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.037)	0.087	ND(0.75)	ND(0.75)	ND(0.75)
	SI8-CS	crawlspace	3/17/09	0	120	ND(8)	86	0.51	0.52	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	1.3	ND(0.04)	0.2	ND(0.8)	ND(0.8)	2.5
	SI8-CS	crawlspace	1/25/10	0	ND(39)	ND(9.7)	ND(19)	0.42	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.049)	0.069	ND(0.97)	ND(0.97)	ND(0.97)
	SI8-SS1	sub slab	3/17/09	0	85	ND(7.1)	49	1.5	0.41	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.71)	1	1.4	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.71)	1.5
	SI8-SS1	sub slab	1/26/10	0	ND(29)	ND(7.4)	18	0.33	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)
	SINS8	near slab	5/12/06	5.3	902	ND(24)	224	8.19	ND(2.62) J	8.56 R	ND(0.548) J	0.976	1.46	8.75	6.52	--	--	2.16	--	--
	SINS8	near slab	5/12/06	9.3	1660	36.5	336	11.8	ND(2.62) J	6.7 R	0.959	1.61	2.41	17.8	8.9	--	--	2.57	--	--
	SINS8	near slab	5/12/06	13.3	8920 J	ND(48) J	253 J	26.3 J	ND(5.24) J	59.5 R	ND(1.1) J	1.76 J	2.67 J	108 J	ND(11.6) J	--	--	3.65 J	--	--
	SINS8	near slab	9/21/06	5.3	45.9	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS8	near slab	9/21/06	9.3	470	ND(24)	303	1.82 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	1.91 J	ND(5.82) J	--	--	0.833 J	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 09	SI9-IA	indoor air	3/21/09	0	150	10	120	0.47	0.69	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	8.5	ND(0.045)	0.61	1	ND(0.9)	ND(0.9)
	SI9-IA	indoor air	2/01/10	0	49	ND(8.2)	62	1	0.24	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	2.8	ND(0.041)	0.93	ND(0.82)	ND(0.82)	0.82
	SI9-CS	crawlspace	3/21/09	0	200	34	100	0.36	0.88	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	4.7	ND(0.07)	0.32	ND(0.7)	ND(0.7)	0.74
	SI9-CS	crawlspace	2/01/10	0	ND(35)	ND(8.8)	22	0.7	ND(0.18)	ND(0.18)	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)	1.2	ND(0.044)	0.48	ND(0.88)	ND(0.88)	ND(0.88)
	SI9-DP	deep probe	3/21/09	0	470	14	150	6.2	1	17	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	0.9	ND(0.15)	ND(0.15)	1.9	ND(0.77)	4.6
	SI9-SS1	sub slab	3/21/09	0	170	ND(6.6)	42	1.2	0.74	ND(0.13)	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.66)	0.84	ND(0.13)	ND(0.13)	0.77	ND(0.66)	1.3
	SI9-SS1	sub slab	1/30/10	0	63	ND(8.2)	31	0.9	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SINS9	near slab	5/16/06	6	328	ND(24)	64.9	4.28	ND(2.62) J	0.8 R	0.924	1.6	2.31	1.13	ND(5.82)	--	--	1.39	--	--
	SINS9	near slab	5/16/06	11	375	27.9	158	5.18	ND(2.62) J	ND(0.442)	0.794	1.4	2.05	1.61	ND(5.82)	--	--	1.23	--	--
	SINS9 Dup	near slab	5/16/06	6	331	ND(24)	96.5	4.36	ND(2.62) J	0.686 R	0.767	1.43	2.14	1.05	ND(5.82)	--	--	1.71	--	--
	SINS9	near slab	9/19/06	6	34.1	ND(24)	35	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS9	near slab	9/19/06	11	65.5	ND(24)	64	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 10	SIIA10	indoor air	7/24/08	0	ND(69)	ND(17)	ND(17)	0.26	0.44 J	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.16	ND(0.86)	--	--
	SIA10 Dup	indoor air	7/24/08	0	ND(62)	ND(16)	19	0.29	0.41 J	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	0.9	ND(0.039)	0.17	ND(0.78)	--	--
	SI10-IA	indoor air	3/17/09	0	ND(31)	ND(7.8)	19 J	0.46	0.15	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.11	ND(0.78)	ND(0.78)	ND(0.78)
	SI10-IA	indoor air	12/08/09	0	45	ND(8.5)	ND(17)	0.64	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.043)	0.052	ND(0.85)	ND(0.85)	1.1
	SI10-CS	crawlspace	3/17/09	0	ND(35)	ND(8.7)	21 J	0.43	0.1	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.043)	0.072	ND(0.87)	ND(0.87)	ND(0.87)
	SI10-CS	crawlspace	2/01/10	0	ND(29)	ND(7.3)	ND(15)	0.52	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.037)	0.089	ND(0.73)	ND(0.73)	ND(0.73)
	SISS10-1	sub slab	7/23/08	0	ND(200)	ND(50)	ND(50)	ND(2.5)	ND(2.5)	ND(0.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5) J	ND(2.5)	--	--
	SISS10-2	sub slab	7/23/08	0	ND(210)	ND(53)	180	3.9	ND(2.7)	ND(0.53)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	3.1	ND(2.7)	ND(2.7) J	ND(2.7)	--	--
	SI10-SS1	sub slab	3/17/09	0	ND(29)	ND(7.2)	ND(14)	2.4	ND(0.29)	ND(0.14)	ND(0.72)	ND(0.72)	ND(72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)
	SI10-SS1	sub slab	12/07/09	0	ND(430)	ND(110)	ND(210)	ND(2.1)	ND(17)	ND(2.1)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(4.3)	ND(4.3)	ND(11)	ND(11)	ND(11)
	SI10-SS1	sub slab	3/30/10	0	ND(34)	ND(8.6)	ND(17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)
	SI10-SS1	sub slab	4/23/10	0	ND(40)	ND(10)	ND(20)	ND(0.2)	ND(1)	ND(0.2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(1)	ND(1)	ND(1)
	SI10-SS2	sub slab	3/17/09	0	ND(37)	ND(9.4)	ND(19)	0.94	ND(0.37)	ND(0.19)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.19)	ND(0.19)	ND(0.94)	ND(0.94)	ND(0.94)
	SI10-SS2	sub slab	12/09/09	0	ND(460)	ND(110)	ND(230)	ND(2.3)	ND(18)	ND(2.3)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(4.6)	ND(4.6)	ND(11)	ND(11)	ND(11)
	SI10-SS2	sub slab	3/30/10	0	ND(32)	ND(8)	ND(16)	0.33	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)
	SI10-SS2	sub slab	4/23/10	0	ND(36)	ND(9.1)	ND(18)	0.59	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)
	SINS10	near slab	5/15/06	4.3	390	ND(24)	194	7.68	ND(2.62) J	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	0.95	ND(5.82)	--	--	0.736	--	--
	SINS10	near slab	5/15/06	8.3	346	ND(48)	84.5	ND(3.19)	ND(5.24) J	1.41 R	ND(1.1)	ND(1.1)	ND(1.1)	2.22	ND(11.6)	--	--	1.8	--	--
	SINS10	near slab	5/15/06	13.3	7740	55.5	550	26.4	ND(5.24) J	65.9 R	ND(1.1)	ND(1.1)	ND(1.1)	82.2	ND(11.6)	--	--	3.34	--	--
	SINS10	near slab	9/19/06	4.3	28.5	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS10	near slab	9/19/06	8.3	28.2	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS10	near slab	9/19/06	13.3	2240	ND(24)	447	3.19 J	ND(2.62) J	2.73 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	25.2 J	14 J	--	--	0.643 J	--	--
	SIOAH10	outdoor air	7/24/08	0	ND(73)	ND(18)	27	0.26	ND(0.36) J	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.046)	ND(0.046)	ND(0.91)	--	--
	SI10-CS1	crawlspace	1/30/10	0	40	ND(7.9)	ND(16)	1.8	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI10-NS	near slab	12/09/09	4.3	ND(190)	ND(48)	ND(96)	ND(0.96)	ND(4.8)	ND(0.96)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(0.96)	ND(1.9)	ND(4.8)	ND(4.8)	ND(4.8)
	SI10-NS	near slab	12/09/09	8.3	ND(1500)	ND(380)	ND(770)	ND(7.7)	ND(38)	ND(7.7)	ND(38)	ND(38)	ND(38)	ND(38)	ND(38)	ND(7.7)	ND(15)	ND(38)	ND(38)	ND(38)
	SI10-NS	near slab	1/26/10	8.3	190	ND(24)	ND(47)	5	ND(2.4)	ND(0.47)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(0.47)	ND(0.47)	ND(2.4)	ND(2.4)	ND(2.4)
	SI10-NS	near slab	1/26/10	13.3	ND(120)	ND(30)	76	5	ND(3)	ND(0.6)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(0.6)	ND(0.6)	ND(3)	ND(3)	ND(3)
	SI10-NS	near slab	1/27/10	4.3	ND(110)	ND(28)	110	0.84	ND(2.8)	ND(0.55)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	ND(0.55)	ND(0.55)	ND(2.8)	ND(2.8)	ND(2.8)
	SI10-NS	near slab	3/29/10	4.3	ND(110)	ND(27)	ND(54)	ND(0.54)	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(0.54)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)
	SI10-NS	near slab	3/29/10	8.3	220	ND(27)	95	2.5	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	3.8	ND(0.54)	ND(0.54)	2.9	ND(2.7)	ND(2.7)
	SI10-NS	near slab	3/29/10	13.3	150	ND(29)	76	ND(0.58)	ND(2.9)	ND(0.58)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(0.58)	ND(0.58)	ND(2.9)	ND(2.9)	ND(2.9)
	SI10-NS	near slab	4/23/10	4.3	ND(92)	ND(23)	ND(46)	ND(0.46)	ND(2.3)	ND(0.46)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(0.46)	ND(0.46)	ND(2.3)	ND(2.3)	ND(2.3)
	SI10-NS	near slab	4/23/10	8.3	ND(120)	ND(30)	ND(60)	2.2	ND(3)	ND(0.6)	ND(3)	ND(3)	ND(3)	ND(3)	3.8	ND(0.6)	ND(0.6)	ND(3)	ND(3)	ND(3)
	SI10-NS	near slab	4/23/10	13.3	ND(83)	ND(21)	ND(42)	ND(0.42)	ND(2.1)	ND(0.42)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(0.42)	ND(0.42)	ND(2.1)	ND(2.1)	ND(2.1)
	SI10-OA	outdoor air	12/08/09	0	40	ND(7.2)	ND(14)	0.63	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	0.73	ND(0.72)	ND(0.036)	0.056	ND(0.72)	ND(0.72)	1.1
	SI10-SS3	sub slab	1/26/10	0	ND(32)	ND(7.9)	ND(16)	0.22	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI10-SS3	sub slab	4/23/10	0	ND(41)	ND(10)	ND(21)	0.3	2.6	ND(0.21)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.21)	ND(0.21)	ND(1)	ND(1)	ND(1)
	SI10-SS4	sub slab	1/26/10	0	ND(30)	ND(7.4)	15	ND(0.15)	11	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 11	SIIA11	indoor air	5/07/08	0	130	32	330	1.3	1.1	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	34	ND(0.041)	11	1.9	--	--
	SIG11	garage air	5/07/08	0	290	45	62	4.2	1.5 J	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	1.6	2.3	ND(0.043)	0.11	2.3	--	--
	SIG11 Dup	garage air	5/07/08	0	270	45	60	4.2	2 J	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	1.5	2.3	ND(0.049)	0.11	2.1	--	--
	SISS11-1	sub slab	5/06/08	0	220	71	140 J	2.9	ND(2.5)	ND(0.5)	ND(2.5)	ND(2.5)	ND(2.5)	3.5	15	ND(2.5)	ND(2.5)	ND(2.5)	--	--
	SISS11-2	sub slab	5/06/08	0	220	ND(49)	120 J	ND(2.5)	ND(2.5)	ND(0.49)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	5.1	ND(2.5)	ND(2.5)	12	--	--
	SINS11	near slab	5/12/06	4.3	78800	952	119000	ND(39.9) J	ND(65.5) J	ND(11) J	ND(13.7) J	ND(13.7) J	ND(13.7) J	ND(17.2) J	ND(146) J	--	--	ND(10.8) J	--	--
	SINS11	near slab	5/12/06	7.5	16300 J	ND(600) J	24800 J	ND(39.9) J	ND(65.5) J	ND(11) J	ND(13.7) J	ND(13.7) J	ND(13.7) J	ND(17.2) J	ND(146) J	--	--	ND(10.8) J	--	--
	SINS11	near slab	9/19/06	4.3	51.7	ND(24)	604	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS11	near slab	9/19/06	7.5	84	ND(80)	ND(93.3)	ND(5.32) J	ND(8.73) J	ND(1.47) J	ND(1.83) J	ND(1.83) J	ND(1.83) J	ND(2.29) J	ND(19.4) J	--	--	ND(1.45) J	--	--
	SINS11 Dup	near slab	9/19/06	4.3	44.9	ND(24)	593	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS11	near slab	5/06/08	4.3	ND(230)	ND(58)	ND(58) J	ND(2.9)	ND(2.9)	ND(0.58)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	--	--
	SINS11	near slab	5/06/08	7.5	ND(210)	ND(52)	170 J	ND(2.6)	ND(2.6)	ND(0.52)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SIOAH11	outdoor air	5/07/08	0	ND(63)	ND(16)	ND(16)	0.37	ND(0.31)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.039)	0.073	ND(0.79)	--	--
SI 12	SI12-IA	indoor air	3/14/09	0	190	ND(11)	80	0.83	0.26	ND(0.21)	ND(1.1)	ND(1.1)	ND(1.1)	1.1	1.3	ND(0.053)	0.28 J	ND(1.1)	ND(1.1)	ND(1.1)
	SI12-IA	indoor air	1/27/10	0	91	ND(7.9)	260	0.73	0.21	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.04)	0.069	ND(0.79)	ND(0.79)	3.7
	SI12-CS	crawlspace	3/14/09	0	ND(31)	ND(7.9)	ND(16)	0.65	0.082	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.039)	0.08 J	ND(0.79)	ND(0.79)	ND(0.79)
	SI12-CS	crawlspace	1/27/10	0	31	ND(7.4)	ND(15)	0.57	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.037)	0.059	ND(0.74)	ND(0.74)	0.8
	SINS12	near slab	5/16/06	5	2700	ND(48)	112	10.4	ND(5.24)	25.8 R	1.29	2.6	3.77	13.9	ND(11.6)	--	--	2.86	--	--
	SINS12 Dup	near slab	5/16/06	5	2740	ND(48)	123	10.6	ND(5.24)	23.7 R	1.27	2.48	3.7	13.5	ND(11.6)	--	--	2.79	--	--
	SINS12	near slab	9/19/06	5	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	SINS12 Dup	near slab	9/19/06	5	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
SI 13	SI13-IA	indoor air	3/18/09	0	1200	120	180	17	1.3	0.45	ND(2.2)	ND(2.2)	ND(2.2)	12	5.2	ND(0.18)	0.76	18	10	24
	SI13-IA	indoor air	1/24/10	0	910	51	96	3.6	1.2	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	15	2.2	ND(0.046)	0.48	4.4	2.8	100
	SI13-GA	garage air	3/18/09	0	490	240	140	21	4.7	ND(0.19)	3.7 J	ND(0.93)	ND(0.93)	4.4	4.5	ND(0.047)	0.19	32	20	13
	SI13-GA	garage air	1/24/10	0	1000	320	270	18	6.6	0.56	6.6 J	0.89	ND(0.86)	11	7.5	0.1	0.3	30	21	58
	SI13-SS1	sub slab	3/18/09	0	190	12	98	2	0.4	0.22	ND(0.75)	ND(0.75)	ND(0.75)	1.5	2.2	ND(0.15)	ND(0.15)	2.1	ND(0.75)	3.1
	SI13-SS1	sub slab	1/25/10	0	ND(33)	ND(8.2)	24	0.19	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.1	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SI13-SS2	sub slab	3/18/09	0	180	7.8	87	1.4	0.57	0.19	ND(0.71)	ND(0.71)	ND(0.71)	1.1	1.1	ND(0.14)	ND(0.14)	1.7	ND(0.71)	2.4
	SI13-SS2	sub slab	1/25/10	0	51	ND(8)	23	0.71	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.8)	3.8
	SI13-SS2 Dup	sub slab	1/25/10	0	67	ND(8.1)	ND(16)	0.74	ND(0.81)	0.18	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.81)	3.9
	SINS13	near slab	5/15/06	5.3	2820	ND(24)	607	17.3	ND(2.62) J	8.56 R	ND(0.548)	0.841	1.3	5.53	ND(5.82)	--	--	3.18	--	--
	SINS13	near slab	5/15/06	10.3	1590 J	38.6 J	215 J	9.89	ND(2.62) J	36.2 R	1.14	2.46	ND(0.548)	9.94	ND(5.82)	--	--	3.3	--	--
	SINS13	near slab	9/19/06	5.3	30.5	ND(24)	30.3	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 14	SIIA14-1	indoor air	5/07/08	0	ND(68)	ND(17)	63	0.28	ND(0.34)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.042)	0.065	ND(0.85)	--	--
	SIIA14-2	indoor air	5/07/08	0	ND(67)	ND(17)	ND(17)	0.27	ND(0.33)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.042)	0.063	ND(0.84)	--	--
	SI14-IA	indoor air	3/16/09	0	ND(36)	ND(9.1)	ND(18)	0.4	ND(0.046)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.046)	0.083 J	ND(0.91)	ND(0.91)	ND(0.91)
	SISS14-1	sub slab	5/06/08	0	ND(200)	ND(51)	ND(51) J	ND(2.6)	ND(2.6)	ND(0.51)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SISS14-2	sub slab	5/06/08	0	ND(190)	110	500 J	4.1	2.8	ND(0.48)	ND(2.4)	ND(2.4)	ND(2.4)	2.9	17	ND(2.4)	ND(2.4)	5.9	--	--
	SI14-SS1	sub slab	3/16/09	0	56	22	200	0.55	0.43	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	6.3	ND(0.13)	ND(0.13)	0.98	ND(0.67)	ND(0.67)
	SI14-SS2	sub slab	3/16/09	0	75	ND(7.5)	43	0.71	ND(0.3)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	0.84	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
	SINS14	near slab	5/15/06	4.3	1200	ND(24)	391	11.9	ND(2.62) J	9.69 R	ND(0.548)	0.648	1	5	ND(5.82)	--	--	2.88	--	--
	SINS14	near slab	5/15/06	9.3	2210	ND(24)	150	10.9	ND(2.62) J	81 R	ND(0.548)	ND(0.548)	ND(0.548)	29.8	ND(5.82)	--	--	1.25	--	--
	SINS14	near slab	10/05/06	4.3	31.8	ND(24)	63.8	1.85 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS14	near slab	10/05/06	9.3	63.1	ND(24)	34.6	1.92 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS14	near slab	5/06/08	4.3	ND(200)	ND(51)	ND(51) J	ND(2.6)	ND(2.6)	ND(0.51)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SINS14	near slab	5/06/08	9.3	ND(260)	ND(64)	ND(64) J	ND(3.2)	ND(3.2)	ND(0.64)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	--	--
	SIOAH14	outdoor air	5/07/08	0	ND(74)	ND(19)	ND(19)	0.29	ND(0.37)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.047)	0.059	ND(0.93)	--	--
SI 15	SINS15	near slab	5/16/06	6.3	2550	ND(48)	174	18.3	ND(5.24)	9.19 R	1.42	2.57	3.88	15.1	ND(11.6)	--	--	2.13	--	--
	SINS15 Dup	near slab	5/16/06	6.3	2410	ND(48)	147	17	ND(5.24)	8.16 R	1.86	2.74	4.1	15.5	ND(11.6)	--	--	2.01	--	--
	SINS15	near slab	9/20/06	6.3	47.9	ND(24)	34.4	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 16	SINS16	near slab	5/10/06	4.3	135	ND(48)	ND(56)	ND(3.19)	ND(5.24)	ND(0.884)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.38)	ND(11.6)	--	--	ND(0.868)	--	--
	SINS16	near slab	9/20/06	4.3	36.3	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS16 Dup	near slab	9/20/06	4.3	37.9	ND(24)	42.2	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 17	SINS17	near slab	5/10/06	4.3	326	ND(48)	ND(56)	3.36	ND(5.24)	ND(0.884)	1.13 J	ND(1.1)	ND(1.1)	2.46	ND(11.6)	--	--	ND(0.868)	--	--
	SINS17	near slab	9/20/06	4.3	82.3	ND(24)	54	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	0.476 J	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 18	SINS18	near slab	5/10/06	4.3	242	ND(48)	ND(56)	ND(3.19)	ND(5.24)	ND(0.884)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.38)	ND(11.6)	--	--	ND(0.868)	--	--
SI 19	SINS19	near slab	5/16/06	5.3	1090	ND(48)	293	7.17	ND(5.24)	21.1 R	1.4	2.7	ND(1.1)	6.43	ND(11.6)	--	--	4.33	--	--
	SINS19	near slab	5/16/06	10.3	1580 J	ND(48)	174	6.28	ND(5.24)	ND(0.884)	ND(1.1)	2.76	ND(1.1)	8.32	ND(11.6)	--	--	9.47	--	--
	SINS19	near slab	9/18/06	5.3	53.8	ND(24)	33.4	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 20	SINS20	near slab	5/16/06	4.3	351	ND(48)	231	4.76	9.98	ND(0.884)	ND(1.1)	1.58	2.36	ND(1.38)	ND(11.6)	--	--	1.52	--	--
	SINS20	near slab	5/16/06	9.3	1420	65.9	2250	7.22	ND(2.62)	12.5 R	10.7	6.28	8.01	6.37	ND(5.82)	--	--	3.57	--	--
	SINS20	near slab	5/16/06	14.3	1600 J	ND(48)	108	7.09	ND(5.24)	ND(0.884)	ND(1.1)	2.66	ND(1.1)	16.9 J	ND(11.6)	--	--	8.42	--	--
	SINS20	near slab	5/16/06	19.6	1400 J	ND(48)	75.2	ND(3.19)	ND(5.24)	ND(0.884)	ND(1.1)	2.28	ND(1.1)	12.4	ND(11.6)	--	--	9.24	--	--
	SINS20 Dup	near slab	5/16/06	9.3	5100 J	ND(48)	60.5	10.4	ND(5.24)	ND(0.884)	ND(1.1)	2.11	ND(1.1)	42.9 J	ND(11.6)	--	--	9	--	--
	SINS20	near slab	9/18/06	4.3	53	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS20	near slab	9/18/06	9.3	85.5	ND(24)	63	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS20	near slab	9/18/06	19.6	2280	ND(60)	424	ND(3.99) J	ND(6.55) J	2.84 R	ND(1.37) J	ND(1.37) J	ND(1.37) J	23.8 J	ND(14.6) J	--	--	ND(1.08) J	--	--
SI 21	SINS21	near slab	5/16/06	4.8	2210	ND(48)	315	17.9	ND(5.24)	34.2 R	1.26	1.84	2.79	11.1	ND(11.6)	--	--	2.45	--	--
	SINS21	near slab	5/16/06	9.3	1150	ND(48)	162	12	ND(5.24)	1.77 R	1.56	2.64	3.99	2.01	ND(11.6)	--	--	2.04	--	--
	SINS21	near slab	9/18/06	4.8	49.9	ND(24)	43.3	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS21	near slab	9/18/06	9.3	61.8	ND(24)	86.5	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
SI 22	SINS22	near slab	5/15/06	5.3	1640	33.4	478	17.6	ND(2.62) J	6.46 R	ND(0.548)	ND(0.548)	ND(0.548)	7.3	13.6	--	--	4.52	--	--
	SINS22	near slab	5/15/06	10.3	139	ND(24)	106	2.46	ND(2.62) J	ND(0.442)	ND(0.548)	1.16	1.76	0.712	ND(5.82)	--	--	1.13	--	--
	SINS22	near slab	5/15/06	15.3	1040	ND(24)	446	10	ND(2.62) J	3.38 R	ND(0.548)	ND(0.548)	ND(0.548)	11	ND(5.82)	--	--	1.53	--	--
	SINS22	near slab	9/19/06	10.3	44.2	ND(24)	71.3	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS22	near slab	9/19/06	15.3	85.8	ND(24)	207	2.31	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
SI 23	SI23-IA	indoor air	3/17/09	0	78	ND(7.4)	52 J	0.79	0.28	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.037)	0.23	ND(0.74)	ND(0.74)	3
	SI23-IA	indoor air	1/27/10	0	42	ND(9.9)	ND(20)	0.7 J	0.29	ND(0.2)	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.05)	0.51	ND(0.99)	ND(0.99)	ND(0.99)
	SI23-GA	garage air	3/17/09	0	300	30	28 J	13	0.84	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	3	0.71	ND(0.032)	0.15	6.8	3.2	5.3
	SI23-GA	garage air	1/27/10	0	230	19	ND(16)	8 J	0.24	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	2.5	ND(0.79)	ND(0.04)	0.14	4.6	1.9	3.4
	SI23-CS	crawlspace	3/17/09	0	ND(31)	ND(7.9)	ND(16) J	0.36	0.063	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.039)	0.077	ND(0.79)	ND(0.79)	ND(0.79)
	SI23-CS	crawlspace	1/27/10	0	ND(34)	ND(8.5)	ND(17)	0.36 J	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.042)	0.097	ND(0.85)	ND(0.85)	ND(0.85)
	SI23-DP	deep probe	3/17/09	0	3100	24	790	38	ND(0.39)	89	ND(0.98)	ND(0.98)	ND(0.98)	7.5	25	ND(0.2)	ND(0.2)	5.8	1.4	86
	SI23-DP	deep probe	1/28/10	0	47	ND(6.7)	50	0.52 J	ND(0.67)	0.24	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	0.81	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)
	SI23-SS1	sub slab	3/17/09	0	ND(29)	ND(7.2)	ND(14)	0.49	ND(0.29)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)
	SI23-SS1 Dup	sub slab	3/17/09	0	ND(29)	ND(7.2)	16	0.55	ND(0.29)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	0.75	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)
	SINS23	near slab	5/16/06	5.3	8650 J	ND(120)	ND(140)	19.6	ND(13.1)	ND(2.21)	ND(2.74)	ND(2.74)	ND(2.74)	139	ND(29.1)	--	--	18.5	--	--
	SINS23	near slab	5/16/06	10.3	674	ND(24)	70.8	4.44	ND(2.62) J	8 R	ND(0.548)	1.12	1.67	4.7	ND(5.82)	--	--	1.07	--	--
	SINS23	near slab	5/16/06	15.3	4510	55.2	392	17.3	ND(2.62)	23.6 R	2.44	3.68	5.11	26.5	ND(5.82)	--	--	3.64	--	--
	SINS23	near slab	9/18/06	5.3	66	ND(24)	101	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	0.703 J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SINS23	near slab	9/18/06	10.3	2310	ND(24)	450	6.22 J	ND(2.62) J	1.45 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	15.4 J	ND(5.82) J	--	--	1.66 J	--	--
	SINS23	near slab	9/18/06	15.3	1470	ND(24)	302	2.25 J	ND(2.62) J	1.25 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	22.7 J	ND(5.82) J	--	--	0.594 J	--	--
SI 24	SI24-IA	indoor air	3/21/09	0	42	7.7	79	0.29	0.11	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	9.1	ND(0.038)	0.086	ND(0.77)	0.8	ND(0.77)
	SI24-IA	indoor air	1/29/10	0	37	ND(6.2)	28	0.59 J	ND(0.12)	ND(0.11)	ND(0.56)	ND(0.56)	ND(0.56)	ND(0.56)	1.7	ND(0.031)	0.067	3.7	ND(0.56)	0.62
	SI24-IA Dup	indoor air	1/29/10	0	41	ND(8.4)	34	0.76 J	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	2	ND(0.042)	0.076	4.2	ND(0.84)	ND(0.84)
	SI24-SS1	sub slab	3/22/09	0	64	15	110	9 J	0.71 J	0.18	ND(0.64)	ND(0.64)	ND(0.64)	0.93	3.2	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.64)	1.5
	SI24-SS1 Dup	sub slab	3/22/09	0	54	17	97	5.1 J	0.97 J	0.17	ND(0.65)	ND(0.65)	ND(0.65)	0.9	3.3	ND(0.13)	ND(0.13)	0.7	ND(0.65)	1.5
	SI24-SS1	sub slab	1/30/10	0	49	ND(6.8)	46	1.6	ND(0.68)	ND(0.14)	ND(0.68)	ND(0.68)	ND(0.68)	0.81	2.1	ND(0.14)	ND(0.14)	ND(0.68)	ND(0.68)	1.6
	SI24-SS2	sub slab	3/22/09	0	41	ND(6.6)	24	1.2	0.35	ND(0.13)	ND(0.66)	ND(0.66)	ND(0.66)	0.72	1	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.66)	0.89
	SI24-SS2	sub slab	1/30/10	0	83	ND(7.8)	34	2.7	ND(0.78)	0.36	ND(0.78)	ND(0.78)	ND(0.78)	2.4	1.1	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	2.3
	SINS24	near slab	10/07/06	4.3	ND(24)	ND(24)	ND(28)	2.32	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	SINS24	near slab	10/07/06	9.3	40.8	ND(24)	ND(28)	1.6	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	SINS24	near slab	10/07/06	14.3	40.1	ND(24)	38.6	1.64	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	0.582	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 25	SI25-IA	indoor air	3/14/09	0	68	9	47	0.96	0.45	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	2.4	ND(0.041)	0.39 J	1.1	ND(0.82)	1.3
	SI25-IA	indoor air	1/24/10	0	41	11	25	0.96	0.48 J	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.6	ND(0.041)	0.24	0.95	0.83	ND(0.82)
	SI25-IA Dup	indoor air	1/24/10	0	51	10	21	0.99	0.32 J	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.4	ND(0.043)	0.25	0.99	ND(0.85)	ND(0.85)
	SI25-GA	garage air	3/14/09	0	130	35	78	2.4	1.7	ND(0.18)	0.95	ND(0.89)	ND(0.89)	1.5	7.8	ND(0.044)	0.56 J	3.7	2.6	2.1
	SI25-GA	garage air	1/24/10	0	140	42	82	1.7	1.3	ND(0.16)	1.1 J	ND(0.79)	ND(0.79)	1.2	4.6	ND(0.04)	0.49	3.7	2.8	1.9
	SI25-CS	crawlspace	3/14/09	0	ND(29)	ND(7.2)	ND(14)	0.34	0.075	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.036)	0.11 J	ND(0.72)	ND(0.72)	ND(0.72)
	SI25-CS	crawlspace	1/24/10	0	ND(31)	ND(7.8)	ND(16)	0.54	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.066	ND(0.78)	ND(0.78)	ND(0.78)
	SI25-SS1	sub slab	3/14/09	0	ND(1100)	ND(280)	ND(560)	6.5	ND(11)	ND(5.6)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(28)	ND(28)	ND(28)
	SI25-SS1 Dup	sub slab	3/14/09	0	ND(1100)	ND(280)	ND(560)	ND(5.6)	ND(11)	ND(5.6)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(28)	ND(28)	ND(28)
	SI25-SS1	sub slab	1/26/10	0	130 J	ND(7.7)	33 J	0.24	0.8	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI25-SS1 Dup	sub slab	1/26/10	0	83 J	ND(7.7)	ND(15) J	0.16	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SINS25	near slab	10/07/06	5.9	35.1	ND(24)	ND(28)	1.69	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	SINS25	near slab	5/06/08	5.9	ND(210)	ND(53)	ND(53) J	ND(2.7)	ND(2.7)	ND(0.53)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	--	--
SI 26	SI26-IA	indoor air	3/14/09	0	38	ND(7.8)	ND(16)	0.35	0.083	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.089 J	ND(0.78)	ND(0.78)	ND(0.78)
	SI26-CS	crawlspace	3/14/09	0	ND(36)	ND(9.1)	ND(18)	0.28	ND(0.046)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.046)	0.069 J	ND(0.91)	ND(0.91)	ND(0.91)
	SINS26	near slab	10/07/06	5	ND(24)	ND(24)	ND(28)	ND(1.6)	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	ND(0.434)	--	--
	SINS26	near slab	5/07/08	5	ND(210)	ND(53)	190	ND(2.7)	ND(2.7)	ND(0.53)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	--	--
	SINS26 Dup	near slab	5/07/08	5	ND(210)	ND(53)	170	ND(2.6)	ND(2.6)	ND(0.53)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	--	--
SI 27	SIIA27	indoor air	1/25/07	0	155	ND(24)	ND(28)	1.75	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	3.09 J	3.32	ND(5.82)	--	--	ND(0.868)	--	--
	SIIA27	indoor air	5/07/08	0	ND(90)	ND(23)	67	0.32	0.45	ND(0.23)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.056)	0.077	ND(1.1)	--	--
	SI27-IA	indoor air	3/15/09	0	ND(34)	ND(8.6)	19	0.44	0.058	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.089 J	ND(0.86)	ND(0.86)	1.1
	SI27-CS	crawlspace	3/15/09	0	ND(34)	ND(8.5)	ND(17)	0.36	0.06	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.042)	0.082 J	ND(0.85)	ND(0.85)	ND(0.85)
	SICS27	crawlspace	1/25/07	0	38.6	ND(24)	ND(28)	ND(1.6)	1.11	ND(0.442)	8.88 J	ND(1.1) J	ND(1.1) J	ND(0.688)	ND(5.82)	--	--	ND(0.868)	--	--
	SICS27	crawlspace	5/07/08	0	ND(68)	ND(17)	18	0.27	ND(0.34)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.043)	0.052	ND(0.85)	--	--
	SIOAH27	outdoor air	1/25/07	0	37.8	ND(24)	ND(28)	ND(1.6)	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	1.48	ND(5.82)	--	--	ND(0.868)	--	--
	SIOAH27	outdoor air	5/07/08	0	ND(68)	ND(17)	21	0.28	ND(0.34)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.043)	0.055	ND(0.85)	--	--
SI 28	SIIA28U1	indoor air	8/15/08	0	ND(88)	ND(22)	ND(22) J	0.67	0.44	ND(0.22)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.045)	0.47	ND(1.1)	--	--
	SIIA28U2	indoor air	8/15/08	0	ND(78)	ND(19)	27 J	0.65	0.42 J	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	1.2	ND(0.042)	0.45	ND(0.97)	--	--
	SIIA28U2 Dup	indoor air	8/15/08	0	65	ND(14)	19 J	0.58	0.3 J	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	0.79	1.4 J	ND(0.036)	0.49	ND(0.72)	--	--
	SI28-FFA	indoor air	3/20/09	0	540	19	330	0.6	0.67	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	2.9 J	ND(0.13)	3.2	ND(0.79)	ND(0.79)	ND(0.79)
	SIIA28	indoor air	5/08/08	0	ND(71)	ND(18)	71	0.43	0.67	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	4.3	ND(0.045)	0.24	ND(0.89)	--	--
	SIIA28B1	indoor air	8/15/08	0	ND(69)	ND(17)	49 J	0.45	1.1	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	1.2 J	ND(0.043)	0.44	ND(0.86)	--	--
	SIIA28B2	indoor air	8/15/08	0	ND(72)	ND(18)	29 J	0.37	1.1	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	1.2 J	ND(0.045)	0.37	ND(0.9)	--	--
	SI28-IA	indoor air	3/20/09	0	250	12	61	0.33	0.59	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	2.5 J	ND(0.056)	1	ND(0.78)	ND(0.78)	0.94
	SI28-IA	indoor air	1/27/10	0	65	ND(7.7)	29	0.82	0.21	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.038)	1.3	ND(0.77)	ND(0.77)	1.4
	SIG28	garage air	5/08/08	0	84	19	27	3.4	0.62	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	1.1	ND(0.91)	ND(0.045)	0.09	2.9	--	--
	SIG28	garage air	8/15/08	0	350	39	31 J	14	1.4	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	3.5	1.5 J	ND(0.038)	0.12	5.9	--	--
	SI28-GA	garage air	3/20/09	0	33	ND(7.8)	19	0.23	0.13	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.039)	0.077	ND(0.78)	ND(0.78)	ND(0.78)
	SI28-GA	garage air	1/27/10	0	86	ND(7.6)	ND(15)	3.1	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	0.92	ND(0.76)	ND(0.038)	0.087	0.96	ND(0.76)	1.4
	SISS28-1	sub slab	5/07/08	0	ND(200)	ND(49)	210	ND(2.5)	ND(2.5)	ND(0.49)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	--
	SISS28-2	sub slab	5/07/08	0	ND(210)	ND(53)	300	ND(2.7)	ND(2.7)	ND(0.53)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	--	--
	SISS28-3	sub slab	8/14/08	0	ND(220)	ND(54)	87	27	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	3	ND(2.7)	ND(2.7)	ND(2.7)	--	--
	SISS28-4	sub slab	8/14/08	0	400	ND(57)	610	ND(2.8)	ND(2.8)	ND(0.57)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	33	ND(2.8)	ND(2.8)	ND(2.8)	--	--
	SI28-SS1	sub slab	3/20/09	0	230	7.9	72	2.2	ND(0.29)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	1	2.8 J	ND(0.15)	ND(0.15)	0.85	ND(0.73)	0.87
	SI28-SS1	sub slab	1/28/10	0	48	ND(7.9)	34 J	0.81	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI28-SS1 Dup	sub slab	1/28/10	0	34	ND(7.9)	ND(16) J	0.94	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI28-SS2	sub slab	3/20/09	0	57	7.6	46	0.69	ND(0.27)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	1.5	ND(0.14)	ND(0.14)	0.69	ND(0.69)	ND(0.69)
	SI28-SS2	sub slab	1/28/10	0	44	ND(7.6)	39	0.56	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)
	SINS28	near slab	5/08/08	5	3000	ND(64)	190	13	ND(3.2)	2.9	ND(3.2)	ND(3.2)	ND(3.2)	29	9.4	ND(3.2)	ND(3.2)	3.4	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 28 cont.	SINS28	near slab	5/08/08	10	1200	ND(61)	490	3.1	ND(3.1)	ND(0.61)	ND(3.1)	ND(3.1)	ND(3.1)	18	13	ND(3.1)	ND(3.1)	ND(3.1)	--	--
	SINS28	near slab	5/08/08	15	1900	ND(52)	65	6.2	ND(2.6)	ND(0.52)	ND(2.6)	ND(2.6)	ND(2.6)	30	ND(2.6)	ND(2.6)	ND(2.6)	2.6	--	--
	SINS28	near slab	5/08/08	20	2200	ND(62)	71	8.2	ND(3.1)	ND(0.62)	ND(3.1)	ND(3.1)	ND(3.1)	34	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	--	--
	SINS28	near slab	5/08/08	25	6100	ND(54)	170	20	ND(2.7)	0.63	ND(2.7)	ND(2.7)	ND(2.7)	44	ND(2.7)	ND(2.7)	ND(2.7)	3.2	--	--
	SI28-NS	near slab	3/20/09	15	240	ND(7.3)	18	9	ND(0.29)	0.33	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.15)	0.79	ND(0.73)	3.3
	SI28-NS	near slab	3/20/09	25	4500	10	250	33	ND(0.31)	0.62	ND(0.77)	ND(0.77)	ND(0.77)	33	0.88	ND(0.15)	ND(0.15)	6.6	0.93	120
	SI28-NS	near slab	3/21/09	5	2100	ND(7.4)	120	5.4	ND(0.29)	1.6	ND(0.74)	ND(0.74)	ND(0.74)	1.9	1.2	ND(0.15)	ND(0.15)	1.1	ND(0.74)	7.3
	SI28-NS	near slab	3/21/09	10	1300	9.3	290	4	ND(0.37)	0.43	ND(0.92)	ND(0.92)	ND(0.92)	7.7	2.3	ND(0.18)	ND(0.18)	1.4	ND(0.92)	13
	SI28-NS	near slab	3/21/09	20	6700	25	1200	35	ND(0.58)	1.7	ND(1.4)	ND(1.4)	ND(1.4)	48	3.8	ND(0.29)	ND(0.29)	7.2	2	75
	SIOAH28	outdoor air	5/08/08	0	ND(66)	ND(17)	ND(17)	0.2	ND(0.33)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.042)	0.067	ND(0.83)	--	--
	SIOAH28	outdoor air	8/15/08	0	ND(72)	ND(18)	ND(18) J	0.44	0.38	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.045)	ND(0.045)	ND(0.9)	--	--
	SI28-FF	indoor air	1/27/10	0	53	ND(11)	22	0.78	0.25	ND(0.21)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.053)	1.6	ND(1.1)	ND(1.1)	1.3
SI 29	SI29-IA	indoor air	3/15/09	0	ND(29)	ND(7.3)	18	0.35	1	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.037)	0.083 J	ND(0.73)	ND(0.73)	ND(0.73)
	SI29-IA	indoor air	1/25/10	0	ND(31)	ND(7.7)	22	0.57	2.8	0.15	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.038)	0.09	ND(0.77)	ND(0.77)	ND(0.77)
	SI29-CS	crawlspace	3/15/09	0	ND(29)	ND(7.3)	19	0.41	1.2	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.037)	0.081 J	ND(0.73)	ND(0.73)	ND(0.73)
	SI29-CS	crawlspace	1/25/10	0	ND(37)	ND(9.2)	ND(18)	0.48	2.5	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.046)	0.074	ND(0.92)	ND(0.92)	ND(0.92)
SI 30	SI30-IA	indoor air	3/16/09	0	42	ND(8.4)	ND(17)	0.58	0.41	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.042)	0.29 J	ND(0.84)	ND(0.84)	0.93
	SI30-IA Dup	indoor air	3/16/09	0	43	ND(9)	ND(18)	0.65	0.41	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.045)	0.3 J	ND(0.9)	ND(0.9)	0.97
	SI30-IA	indoor air	1/23/10	0	49	ND(9.1)	ND(18)	0.77	0.19	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.046)	0.25	ND(0.91)	ND(0.91)	0.95
	SI30-SS1	sub slab	3/16/09	0	140	9.5	110	2.2	0.34	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	1	1.4	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.69)	1.1
	SI30-SS2	sub slab	3/16/09	0	81 J	18 J	190 J	0.64 J	0.95 J	ND(0.14)	ND(0.68)	ND(0.68)	ND(0.68)	ND(0.68)	4.2 J	ND(0.14)	ND(0.14)	ND(0.68)	ND(0.68)	ND(0.68)
	SI30-SS2 Dup	sub slab	3/16/09	0	110 J	ND(6.9) J	59 J	1.2 J	ND(0.27) J	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	2.3 J	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)
SI 31	SI31-IA	indoor air	3/14/09	0	310	ND(9.7)	74	0.69	0.35	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	2.5	2	ND(0.049)	0.38 J	ND(0.97)	ND(0.97)	3.8
	SI31-IA	indoor air	1/28/10	0	190	ND(9.5)	40	1.2 J	0.33	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	2	2.2	ND(0.048)	0.39	ND(0.95)	ND(0.95)	3
	SI31-CS	crawlspace	3/14/09	0	300	ND(8.5)	91	0.63	0.35	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	2.1	2.9	ND(0.043)	0.43 J	ND(0.85)	ND(0.85)	3.2
	SI31-CS	crawlspace	1/28/10	0	94	ND(9.3)	24	0.89 J	0.23	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	1.5	1.3	ND(0.047)	0.21	ND(0.93)	ND(0.93)	2.1
	SI31-SS1	sub slab	3/14/09	0	75	18	74	4.3	0.49	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	1.9	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	1
	SI31-SS1	sub slab	1/29/10	0	67	ND(8.7)	35 J	2.9 J	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	1.2 J	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	1.5
	SI31-SS1 Dup	sub slab	1/29/10	0	62	ND(8.7)	57 J	2.7 J	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	2.6 J	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	1.3
	SI31-SS2	sub slab	3/14/09	0	42	ND(7.2)	62	2.2	0.34	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	1.5	0.76 J	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	1.3
	SI31-SS2	sub slab	1/29/10	0	45	ND(7.8)	47	0.22 J	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)
SI 32	SI32-IA	indoor air	3/18/09	0	ND(100)	ND(26)	110	0.75	0.33	ND(0.52)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(0.039)	0.36	ND(2.6)	ND(2.6)	ND(2.6)
	SI32-IA	indoor air	1/27/10	0	53	ND(9.5)	21	0.63 J	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.048)	0.075	ND(0.95)	ND(0.95)	2.6
	SI32-CS	crawlspace	3/18/09	0	ND(44)	ND(11)	ND(22)	ND(0.22)	0.13	ND(0.22)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.056)	0.056	ND(1.1)	ND(1.1)	ND(1.1)
	SI32-CS	crawlspace	1/27/10	0	ND(35)	ND(8.7)	ND(17)	0.47 J	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.043)	0.052	ND(0.87)	ND(0.87)	ND(0.87)
	SI32-DP	deep probe	3/18/09	0	270	14	790	2.6 J	0.43	1.9	ND(0.71)	ND(0.71)	ND(0.71)	1	6.2 J	ND(0.14)	ND(0.14)	0.97	ND(0.71)	14
	SI32-DP Dup	deep probe	3/18/09	0	220	7.3	240	2 J	ND(0.28)	1.9	ND(0.71)	ND(0.71)	ND(0.71)	0.99	3.9 J	ND(0.14)	ND(0.14)	1.1	ND(0.71)	14
	SI32-DP	deep probe	1/28/10	0	95 J	ND(15)	ND(30) J	4	ND(1.5)	0.99	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5) J	ND(0.3)	ND(0.3)	ND(1.5) J	ND(1.5)	2.4
	SI32-DP Dup	deep probe	1/28/10	0	140 J	13	98 J	5.4	ND(0.91)	0.93	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	4.4 J	ND(0.18)	ND(0.18)	3.2 J	0.93	2.9
SI 33	SI33-IA	indoor air	3/15/09	0	94	13	110	0.75	0.47	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	0.99	ND(0.044)	0.28 J	0.96	ND(0.87)	ND(0.87)
	SI33-IA	indoor air	1/23/10	0	39	12	66	0.68	0.62	ND(0.13)	0.85	ND(0.67)	ND(0.67)	0.7	4.8	ND(0.034)	0.19	0.69	ND(0.67)	0.88
	SI33-CS	crawlspace	3/15/09	0	ND(35)	ND(8.7)	23	0.49	0.2	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.044)	0.15 J	ND(0.87)	ND(0.87)	ND(0.87)
	SI33-CS	crawlspace	1/23/10	0	ND(37)	ND(9.3)	ND(19)	0.67	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	1.3	ND(0.047)	0.089	ND(0.93)	ND(0.93)	ND(0.93)
	SI33-GA	garage air	1/23/10	0	ND(35)	15	69	0.81	0.49	ND(0.17)	1.1	ND(0.87)	ND(0.87)	ND(0.87)	6.6	0.043	0.16	ND(0.87)	ND(0.87)	ND(0.87)
SI 34	SI34-IA	indoor air	3/14/09	0	75	ND(9.6)	51	0.45	0.17	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.048)	0.21 J	ND(0.96)	ND(0.96)	1.3
	SI34-CS	crawlspace	3/14/09	0	ND(33)	ND(8.2)	23	0.3	0.055 J	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.041)	0.085 J	ND(0.82)	ND(0.82)	ND(0.82)
	SI34-CS Dup	crawlspace	3/14/09	0	ND(26)	ND(6.4)	23	0.34	0.74 J	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.032)	0.08	ND(0.64)	ND(0.64)	ND(0.64)
	SI34-DP	deep probe	3/14/09	0	1300	11	160	7.7	ND(0.33)	4.1	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	4.8	ND(0.16)	0.19	4	0.91	140

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SI 35	SI35-IA	indoor air	3/15/09	0	160	ND(8.6)	26	1	0.36	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	5.5	1.5	ND(0.043)	0.23 J	ND(0.86)	ND(0.86)	12
	SI35-IA	indoor air	1/26/10	0	ND(32)	ND(8.1)	20	0.68	0.29	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	1.3	ND(0.04)	0.33	ND(0.81)	ND(0.81)	ND(0.81)
	SI35-GA	garage air	3/15/09	0	200	ND(8)	29	1.3	0.3	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	5.2	1.6	ND(0.04)	0.13 J	1	ND(0.8)	15
	SI35-GA	garage air	1/26/10	0	ND(30)	ND(7.5)	ND(15)	0.63	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.038)	0.065	ND(0.75)	ND(0.75)	ND(0.75)
	SI35-SS1	sub slab	3/15/09	0	3000	20	420	4.2	2.4	0.2	1.5	ND(0.66)	ND(0.66)	16	2.5	ND(0.13)	ND(0.13)	12	ND(0.66)	2.2
	SI35-SS1	sub slab	1/27/10	0	260	25	88	3.5	7.8	0.27	ND(1.2)	ND(1.2)	ND(1.2)	4.2	4.9	ND(0.24)	ND(0.24)	1.5	ND(1.2)	12
	SI35-SS2	sub slab	3/15/09	0	48	ND(7)	35	1.5	3.3	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	0.93	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	0.74
	SI35-SS2	sub slab	1/27/10	0	ND(31)	ND(7.7)	ND(15)	0.53	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
SI 36	SI36-IA	indoor air	3/17/09	0	230	ND(9.3)	190	0.63	0.47	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	1.7	1.5	ND(0.23)	ND(0.23)	1	ND(0.93)	ND(0.93)
	SI36-IA	indoor air	1/26/10	0	78	ND(9.4)	39	0.86	0.31	0.21	ND(0.94)	ND(0.94)	ND(0.94)	1.2	ND(0.94)	ND(0.047)	0.81	ND(0.94)	ND(0.94)	1
	SI36-CS	crawlspace	3/17/09	0	61	ND(7.2)	40	0.31	0.081	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.036)	0.058	ND(0.72)	ND(0.72)	ND(0.72)
	SI36-CS	crawlspace	1/26/10	0	ND(26)	ND(6.5)	ND(13)	0.26	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.032)	0.11	ND(0.65)	ND(0.65)	ND(0.65)
SI 37	SI37-IA	indoor air	3/17/09	0	ND(33)	ND(8.2)	40	0.52	0.25	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	0.99	ND(0.041)	0.098	ND(0.82)	ND(0.82)	1.2
	SI37-IA	indoor air	1/26/10	0	48	ND(8.6)	ND(17)	1	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.061	ND(0.86)	ND(0.86)	1.1
	SI37-SS1	sub slab	3/17/09	0	94	ND(6.5)	50	1.1	ND(0.26)	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.13)	0.69	2.5	ND(0.13)	ND(0.13)	0.66	ND(0.65)	2.3
	SI37-SS1	sub slab	1/27/10	0	93	ND(15)	50 J	1.9 J	ND(1.5)	ND(0.31)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(0.31)	ND(0.31)	ND(1.5)	ND(1.5)	ND(1.5)
	SI37-SS1 Dup	sub slab	1/27/10	0	50	ND(7.9)	ND(16) J	1.3 J	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI37-SS2	sub slab	3/17/09	0	ND(28)	ND(7)	ND(14)	ND(0.14)	ND(0.28)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)
SI 38	SI38-IA	indoor air	3/17/09	0	490	17	97 J	16	1.1	22	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	2.3	ND(0.12)	0.29	6.1	1.3	1.6
	SI38-IA	indoor air	1/25/10	0	78	ND(8.5)	33	2.8	ND(0.17)	2.6	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.9	ND(0.042)	0.41	2	ND(0.85)	ND(0.85)
	SI38-CS	crawlspace	3/17/09	0	ND(31)	ND(7.9)	17	0.46	0.049	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.039)	0.089	ND(0.79)	ND(0.79)	ND(0.79)
	SI38-CS Dup	crawlspace	3/17/09	0	ND(34)	ND(8.6)	17 J	0.42	0.071	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.087	ND(0.86)	ND(0.86)	ND(0.86)
	SI38-CS	crawlspace	1/25/10	0	ND(35)	ND(8.9)	ND(18)	0.44	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.044)	0.17	ND(0.89)	ND(0.89)	ND(0.89)
SI 39	SI39-IA	indoor air	3/19/09	0	51	ND(8.5)	180	0.39	0.38	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	7.7	ND(0.043)	0.19	ND(0.85)	ND(0.85)	ND(0.85)
	SI39-IA Dup	indoor air	3/19/09	0	55	ND(9)	170	0.41	0.41	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	7.7	ND(0.045)	0.19	ND(0.9)	ND(0.9)	ND(0.9)
	SI39-IA	indoor air	1/24/10	0	ND(33)	ND(8.3)	25	0.84	0.33	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	1.7	0.042	0.16	ND(0.83)	ND(0.83)	ND(0.83)
	SI39-SS1	sub slab	3/19/09	0	260	ND(7.5)	260	3.6	0.84	0.17	ND(0.75)	ND(0.75)	ND(0.75)	1.1	4.4	ND(0.15)	ND(0.15)	1.3	ND(0.75)	2.4
	SI39-SS1	sub slab	1/25/10	0	87	ND(7.7)	58	1.8	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	0.81	2	ND(0.15)	ND(0.15)	3.3	ND(0.77)	1.7
	SI39-SS2	sub slab	3/19/09	0	100	ND(7.5)	69	1.6	0.48	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	1.5	2	ND(0.15)	ND(0.15)	0.78	ND(0.75)	2.8
	SI39-SS2	sub slab	1/25/10	0	ND(33)	ND(8.3)	18	0.58	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)
SI 40	SI40-IA1	indoor air	3/21/09	0	42	ND(9.3)	29	0.3	2.6	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	2	ND(0.047)	0.086	ND(0.93)	ND(0.93)	1
	SI40-IA1	indoor air	2/01/10	0	ND(36)	ND(9)	ND(18)	0.56	1.9	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.045)	0.11	ND(0.9)	ND(0.9)	1.5
	SI40-IA2	indoor air	3/21/09	0	110	9.4	150	0.69	5.5	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	1.9	15	ND(0.056)	0.19	1.9	ND(0.79)	4.1
	SI40-IA2	indoor air	2/01/10	0	62	ND(8.5)	65	0.58	1.1	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	5	ND(0.042)	0.13	1.8	ND(0.85)	3.7
	SI40-IA3	indoor air	3/21/09	0	110	9.3	190	0.45	5	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	1.4	19	ND(0.04)	0.11	1.6	ND(0.8)	2.4
	SI40-IA3	indoor air	2/01/10	0	41	ND(7.1)	120	0.53	2.3	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	10	ND(0.036)	0.11	1.3	ND(0.71)	1.2
	SI40-CS1	crawlspace	3/21/09	0	70	ND(8.7)	33	0.27	1.7	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	1.7 J	ND(0.043)	0.13	ND(0.87)	ND(0.87)	1.9
	SI40-CS1 Dup	crawlspace	3/21/09	0	70	ND(8.2)	32	0.31	2	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	0.88	2.3 J	ND(0.041)	0.14	ND(0.82)	ND(0.82)	2.2
	SI40-CS1	crawlspace	2/01/10	0	ND(38)	ND(9.6)	27	0.49	11	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	1.4	ND(0.048)	0.13	ND(0.96)	ND(0.96)	1.9
	SI40-CS1 Dup	crawlspace	2/01/10	0	ND(39)	ND(9.7)	34	0.53	13	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	1.4	ND(0.049)	0.13	ND(0.97)	ND(0.97)	2
	SI40-CS2	crawlspace	3/21/09	0	160	ND(8.5)	33	0.53	1.8	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	2.2	3.5	ND(0.043)	0.17	ND(0.85)	ND(0.85)	4.1
	SI40-CS2	crawlspace	2/01/10	0	91	ND(9.2)	38	0.72	1.8	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	1.5	3.1	ND(0.046)	0.15	ND(0.92)	ND(0.92)	2.8
	SI40-SS1	sub slab	3/21/09	0	730	56	210	3.8	2	0.32	0.86 J	ND(0.8)	ND(0.8)	3.9	1.6 J	ND(0.16)	ND(0.16)	1.2	ND(0.8)	8.5
	SI40-SS1	sub slab	1/30/10	0	89	ND(17)	56 J	1.6 J	ND(1.7)	ND(0.35)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)	1.9	ND(0.35)	ND(0.35)	ND(1.7)	ND(1.7)	ND(1.7)
	SI40-SS1 Dup	sub slab	1/30/10	0	79	15	82 J	0.9 J	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	2.1	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)
SI 41	SI41-IA1	indoor air	3/21/09	0	130	ND(8)	68 J	0.49	0.28 J	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	2.8 J	ND(0.04)	0.2	1	ND(0.8)	13
	SI41-IA1 Dup	indoor air	3/21/09	0	120	ND(7.9)	42 J	0.49	0.37 J	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.7 J	0.078	0.25	1	ND(0.79)	13
	SI41-IA2	indoor air	3/21/09	0	150	ND(7.7)	83	1.1	0.44	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	1	5.3 J	ND(0.038)	0.11	2.1	ND(0.77)	14
	SI41-CS1	crawlspace	3/21/09	0	45	ND(8.6)	32	0.25	0.51	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.11	ND(0.86)	ND(0.86)	1.8
	SI41-SS1	sub slab	3/21/09	0	35 J	ND(7.3)	42	1.8	0.61	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	1.7	ND(0.15)	ND(0.15)	1.8	ND(0.73)	ND(0.73)
	SI41-SS1 Dup	sub slab	3/21/09	0	120 J	9	71	2.1	0.75	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	1.9	ND(0.15)	ND(0.15)	2	ND(0.73)	ND(0.73)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth	C5-C8, Aliphatic, Adjusted	C9-C10, Aromatic, Adjusted	C9-C12, Aliphatic, Adjusted	Benzene	Naphthalene	1,3-Butadiene	n-Butyl-benzene	sec-Butyl-benzene	tert-Butyl-benzene	Cyclohexane	Decane	1,2-Dibromo-ethane	1,2-Dichloro-ethane	Ethyl-benzene	4-Ethyltoluene	Heptane
				(ft-bgs)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)
SI 42	SI42-IA	indoor air	3/16/09	0	130	ND(8.8)	33	0.77	0.34	ND(0.18)	ND(0.88)	ND(0.88)	ND(0.88)	2.6	1.5	0.15 J	0.25 J	ND(0.88)	ND(0.88)	5.1
	SI42-IA	indoor air	1/26/10	0	37	ND(7.3)	ND(15)	0.64	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.037)	0.25	ND(0.73)	ND(0.73)	ND(0.73)
	SI42-CS	crawlspace	3/16/09	0	120	ND(8.3)	92 J	0.71	0.28 J	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	2.4	1.1	ND(0.041)	0.13 J	ND(0.83)	ND(0.83)	4.7
	SI42-CS Dup	crawlspace	3/16/09	0	110	ND(12)	ND(25) J	0.75	0.18 J	ND(0.25)	ND(1.2)	ND(1.2)	ND(1.2)	2.4	1.4	ND(0.062)	0.12 J	ND(1.2)	ND(1.2)	4.5
	SI42-CS	crawlspace	1/26/10	0	ND(33)	ND(8.3)	ND(17)	0.61	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.041)	0.1	ND(0.83)	ND(0.83)	ND(0.83)
	SI42-SS1	sub slab	3/16/09	0	81	ND(7.6)	70	1.9	0.83	0.27	ND(0.15)	ND(0.76)	ND(0.15)	1.2	1.4	ND(0.15)	ND(0.15)	1.8	ND(0.76)	1
	SI42-SS1	sub slab	1/27/10	0	54	ND(7.2)	42	0.4	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)
	SI42-SS1 Dup	sub slab	1/27/10	0	47	ND(7.1)	35	0.49	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.71)
SI 44	SI44-IA	indoor air	3/20/09	0	37	ND(8.6)	20	0.28	0.41	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.043)	0.15	ND(0.86)	ND(0.86)	ND(0.86)
	SI44-IA Dup	indoor air	3/20/09	0	33	ND(7.2)	16	0.24	0.45	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.036)	0.15	ND(0.72)	ND(0.72)	ND(0.72)
	SI44-IA	indoor air	1/24/10	0	ND(39)	ND(9.7)	ND(19)	0.68	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.049)	0.26	ND(0.97)	ND(0.97)	ND(0.97)
	SI44-SS1	sub slab	3/20/09	0	68	ND(6.7)	29	2	0.3	0.36 J	ND(0.67)	ND(0.67)	ND(0.67)	1.1	1	ND(0.13)	ND(0.13)	0.82	ND(0.67)	1.6
	SI44-SS1	sub slab	1/25/10	0	ND(31)	ND(7.7)	ND(15)	0.39	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI44-SS1 Dup	sub slab	1/25/10	0	ND(31)	ND(7.7)	ND(15)	0.44	1.2	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI44-SS2	sub slab	3/20/09	0	1900	18	210	4	ND(0.28)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	36	7	ND(0.14)	ND(0.14)	4.4	1.5	130
	SI44-SS2	sub slab	1/25/10	0	47	ND(7)	19	3.2	ND(0.7)	0.34	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	1	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	0.84
SI 45	SI45-IA	indoor air	3/19/09	0	48	ND(8.8)	26	0.54	0.38	ND(0.18)	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.044)	0.098	ND(0.88)	ND(0.88)	1.2
	SI45-IA	indoor air	1/23/10	0	59	ND(15)	47	27	5.3	4.4	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(0.044)	0.14	ND(1.5)	ND(1.5)	ND(1.5)
	SI45-GA	garage air	3/19/09	0	130	ND(9.5)	ND(19)	2.9	ND(0.048)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	1.4	ND(0.95)	ND(0.048)	0.11	1.1	ND(0.95)	2.2
	SI45-CS	crawlspace	3/19/09	0	44	ND(8)	26	0.84	0.16	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.04)	0.083	ND(0.8)	ND(0.8)	1.1
	SI45-CS	crawlspace	1/23/10	0	ND(37)	ND(9.2)	59	2.4	0.48	0.19	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	1.2	ND(0.046)	0.08	ND(0.92)	ND(0.92)	ND(0.92)
	SI45-DP	deep probe	1/24/10	0	64	27	110	1.6	ND(0.78)	0.32	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	7.2	ND(0.16)	ND(0.16)	3.7	1.6	ND(0.78)
SI 46	SI46-IA	indoor air	3/19/09	0	210	19	100	3.3	0.57	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	1.2	1.7	ND(0.043)	0.29	4.1	1.4	4.3
	SI46-IA	indoor air	1/28/10	0	42	ND(9.3)	ND(19)	0.59 J	0.26	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.047)	0.1	ND(0.93)	ND(0.93)	1
	SI46-SS1	sub slab	3/19/09	0	240	ND(7.6)	100	1.6	0.33	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	0.83	1.4 J	ND(0.15)	ND(0.15)	1.3	ND(0.76)	1
	SI46-SS1	sub slab	1/29/10	0	110 J	ND(7.7)	36	3.8 J	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	0.78	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI46-SS1 Dup	sub slab	1/29/10	0	50 J	ND(7.7)	31	0.71 J	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI46-SS2	sub slab	3/19/09	0	120	11	97	1.5	0.56	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	1.7	ND(0.14)	ND(0.14)	1.8	ND(0.7)	1.4
	SI46-SS2	sub slab	1/29/10	0	ND(32)	ND(7.9)	ND(16)	1.4 J	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
SI 47	SI47-IA	indoor air	3/19/09	0	560	74	230	25	2.1	0.75	1.2 J	ND(0.82)	ND(0.82)	5.2	3 J	ND(0.041)	0.23	14	5.7	9.5
	SI47-IA	indoor air	1/28/10	0	46	ND(7)	ND(14)	0.96 J	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.035)	0.096	ND(0.7)	ND(0.7)	0.79
	SI47-GA	garage air	3/19/09	0	3800	490	450	210	7.6	2.1	7.5 J	1.6	ND(0.81)	39	11 J	ND(0.1)	0.86	100	40	76
	SI47-GA	garage air	1/28/10	0	ND(32)	ND(7.9)	ND(16)	0.5 J	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.04)	0.061	ND(0.79)	ND(0.79)	0.84
	SI47-CS	crawlspace	3/19/09	0	490	59	150	21	1.2	0.61	ND(0.84)	ND(0.84)	ND(0.84)	4.4	2.5 J	ND(0.042)	0.19	12	4.8	8.2
	SI47-CS	crawlspace	1/28/10	0	31	ND(6.9)	ND(14)	0.4 J	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.034)	0.048	ND(0.69)	ND(0.69)	ND(0.69)
	SI47-SS1	sub slab	3/19/09	0	67	10	33	1.1	0.84	0.51	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	1.3	ND(0.14)	ND(0.14)	0.88	ND(0.72)	0.78
	SI47-SS1	sub slab	1/29/10	0	41	ND(7.6)	43	3.1 J	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)	0.83	2.7	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76)
SI 49	SI49-IA	indoor air	3/21/09	0	130	ND(8.1)	42	0.37	3.6	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	1.7	ND(0.04)	0.13	ND(0.81)	ND(0.81)	3
	SI49-IA	indoor air	1/27/10	0	58	ND(7.7)	ND(15)	0.92	0.57	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	0.96	ND(0.77)	ND(0.038)	0.079	ND(0.77)	ND(0.77)	1.8
	SI49-CS	crawlspace	3/21/09	0	44	ND(7.7)	ND(15)	0.28	6.4	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	0.8	ND(0.039)	0.087	ND(0.77)	ND(0.77)	0.79
	SI49-CS	crawlspace	1/27/10	0	45	ND(8.7)	ND(17)	0.77	1.4	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.043)	0.064	ND(0.87)	ND(0.87)	1.3
SI 50	SI50-IA	indoor air	3/21/09	0	370	12	130	0.58	0.56	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	3.1	7.8	ND(0.13)	0.17	0.78	ND(0.77)	5.6
	SI50-IA	indoor air	1/29/10	0	110	18	31	1	0.51	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)	1.9	0.96	ND(0.041)	0.13	2.2	1.1	2.8
	SI50-SS1	sub slab	3/21/09	0	130	8.5	51	1.4	0.52	0.19	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	1.5	ND(0.14)	ND(0.14)	1	ND(0.72)	1.2
	SI50-SS1	sub slab	1/29/10	0	ND(33)	ND(8.2)	ND(16)	0.23	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SI50-SS2	sub slab	3/21/09	0	140	ND(6.6)	61	1.3	ND(0.26)	0.13	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.66)	0.91	ND(0.13)	ND(0.13)	0.66	ND(0.66)	ND(0.66)
	SI50-SS2	sub slab	1/29/10	0	ND(150)	ND(37)	ND(74)	1.2	ND(3.7)	ND(0.74)	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)	ND(0.74)	ND(0.74)	ND(3.7)	ND(3.7)	ND(3.7)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
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Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SIVW	SIVW1	nested well	5/11/06	5.3	2600	37.2	485	16.5	ND(2.62) J	6.07 R	ND(0.548) J	ND(0.548)	ND(0.548)	21.8	15.9	--	--	8.08	--	--
	SIVW1	nested well	5/11/06	10.3	1620	ND(24)	271	9.63	ND(2.62) J	8.12 R	ND(0.548) J	ND(0.548)	ND(0.548)	11.2	ND(5.82)	--	--	1.12	--	--
	SIVW1	nested well	5/11/06	14.3	6600	ND(24)	520	31.2	ND(2.62) J	ND(0.442)	ND(0.548) J	ND(0.548)	0.555	53	8.62	--	--	4.32	--	--
	SIVW1	nested well	10/05/06	5.3	68.2	ND(24)	140	3.28 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	1.04 J	--	--
	SIVW1	nested well	10/05/06	10.3	169	ND(24)	241	3.19 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	0.872 J	--	--
	SIVW1	nested well	10/05/06	14.3	213	ND(24)	380	2.49 J	ND(2.62) J	0.859 R	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SIVW2	nested well	5/11/06	5.3	4340	ND(24)	604	10.8	ND(2.62) J	3.52 R	ND(0.548) J	ND(0.548)	ND(0.548)	21.4	ND(5.82)	--	--	2.16	--	--
	SIVW2	nested well	5/11/06	10.3	2280	ND(48)	67.2	7.74	ND(5.24)	ND(0.884)	ND(1.1)	ND(1.1)	ND(1.1)	18.4	ND(11.6)	--	--	2	--	--
	SIVW2	nested well	5/11/06	15.3	8200	ND(48)	720	8.77	6.94 J	ND(0.442)	ND(0.548)	0.57	ND(0.548)	22.8	8.84	--	--	7.11	--	--
	SIVW2	nested well	5/11/06	19.3	17600	ND(48)	3820	15.8	ND(5.24)	ND(0.884)	ND(1.1)	ND(1.1)	ND(1.1)	38.6	44.6	--	--	5.4	--	--
	SIVW2	nested well	9/21/06	5.3	212	ND(24)	1000	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	2.9 J	ND(5.82) J	--	--	ND(0.434) J	--	--
	SIVW2	nested well	9/21/06	10.3	118	ND(24)	166	1.72 J	23 J	ND(0.442) J	2.16 J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	1.31 J	--	--
	SIVW2	nested well	9/21/06	15.3	27	ND(24)	ND(28)	ND(1.6) J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	ND(0.688) J	ND(5.82) J	--	--	0.737 J	--	--
	SIVW2	nested well	9/21/06	19.3	7350	ND(24)	4040	10.4 J	ND(2.62) J	ND(0.442) J	ND(0.548) J	ND(0.548) J	ND(0.548) J	40.5 J	ND(5.82) J	--	--	2.75 J	--	--
	SIVW3	nested well	5/11/06	5.3	12300	1100	10800	128	11.2 J	1.07 R	53.6 J	38.1	ND(1.1)	215	635	--	--	421	--	--
	SIVW3	nested well	5/11/06	10.3	955000	20800	156000	2280	ND(442) J	ND(74.7) J	ND(92.6) J	130	303	2600	9520	--	--	5590	--	--
	SIVW3	nested well	5/11/06	15.3	12600000	63700	546000	39900	ND(9300) J	2320 R	ND(1950) J	ND(1950) J	ND(1950) J	410000	ND(20700) J	--	--	18000	--	--
	SIVW3	nested well	10/07/06	5.3	365	120	1320	2.46	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	5.37	41.4 J	--	--	0.912	--	--
	SIVW3	nested well	10/07/06	10.3	1840	1750	15800	3.39	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	21.7	ND(5.82) J	--	--	7.18	--	--
	SIVW3	nested well	10/07/06	15.3	11800000	ND(112000)	133000	30600	18700	3580 R	ND(2570)	ND(2570)	ND(2570)	517000	ND(27300) J	--	--	12200	--	--
	SIVW3	nested well	10/07/06	19.3	99200	ND(2350)	ND(2750)	520	ND(257)	267 R	ND(53.8)	ND(53.8)	ND(53.8)	2320	ND(571) J	--	--	ND(42.6)	--	--
	SIVW3	nested well	1/25/07	5.3	97.9 R	ND(24) R	464 R	ND(1.6) R	ND(1.05) R	ND(0.442) R	ND(1.1) R	ND(1.1) R	ND(1.1) R	ND(0.688) R	ND(5.82) R	--	--	ND(0.868) R	--	--
	SIVW3	nested well	1/25/07	10.3	5790	874	6760	9.38	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	114	ND(5.82)	--	--	1.9	--	--
	SIVW3	nested well	1/25/07	15.3	112000 R	ND(240) R	437 R	89.4 R	ND(1.05) R	ND(0.442) R	ND(1.1) R	ND(1.1) R	ND(1.1) R	1500 R	6.45 R	--	--	19.1 R	--	--
	SIVW3 Dup	nested well	1/25/07	10.3	5060	1100	8050	8.8	ND(1.05)	ND(0.442)	ND(1.1) J	ND(1.1) J	ND(1.1) J	104	ND(5.82)	--	--	2.08	--	--
	SIVW4	nested well	5/11/06	5.3	9840	ND(24)	1650	17.5	ND(2.62) J	2.03 R	ND(0.548) J	ND(0.548)	ND(0.548)	62.2	8.14	--	--	4.24	--	--
	SIVW4	nested well	5/11/06	10.3	2660	ND(24)	117	10.6	ND(2.62) J	ND(0.442)	ND(0.548) J	ND(0.548)	ND(0.548)	64.9	6.9	--	--	5.39	--	--
	SIVW4	nested well	5/11/06	15.3	2880	ND(24)	155	5.93	ND(2.62) J	ND(0.442)	ND(0.548) J	ND(0.548)	ND(0.548)	29.5	ND(5.82)	--	--	1.27	--	--
	SIVW4	nested well	5/11/06	20.3	4910	ND(48)	439	17.2	ND(5.24) J	1.32 R	ND(1.1) J	ND(1.1)	ND(1.1)	41.8	ND(11.6)	--	--	4.78	--	--
	SIVW4	nested well	5/11/06	25.3	17500	ND(48)	1070	33.5	ND(5.24) J	2.59 R	ND(1.1) J	ND(1.1)	ND(1.1)	116	ND(11.6)	--	--	13.3	--	--
	SIVW4	nested well	5/11/06	28.3	53700	ND(120)	1820	54.2	ND(13.1) J	9.8 R	ND(2.74) J	ND(2.74)	ND(2.74)	357	ND(29.1)	--	--	24.7	--	--
	SIVW4	nested well	9/21/06	5.3	37.8 J	ND(24)	43.1	ND(1.6)	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	2.68 J	--	--
	SIVW4	nested well	9/21/06	10.3	4060	ND(77.4)	965	15	ND(8.45)	ND(1.43)	ND(1.77)	ND(1.77)	ND(1.77)	103	ND(18.8) J	--	--	11.9 J	--	--
	SIVW4	nested well	9/21/06	15.3	8970	ND(49.5)	1310	16.8	ND(5.4)	ND(0.911)	ND(1.13)	ND(1.13)	ND(1.13)	133	18.4 J	--	--	5.72	--	--
	SIVW4	nested well	9/21/06	20.3	5220	ND(24)	1830	19.2	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	44.2	36.4 J	--	--	8.58	--	--
	SIVW4	nested well	9/21/06	25.3	6730	ND(24)	1400	20.4	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	73.5	17.3 J	--	--	12.8	--	--
	SIVW4 Dup	nested well	9/21/06	5.3	24.5 J	ND(24)	ND(28)	ND(1.6)	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	1.45 J	--	--
	SIVW4 Dup	nested well	9/21/06	10.3	4010	ND(60.6)	927	13.3	ND(6.61)	ND(1.12)	ND(1.38)	ND(1.38)	ND(1.38)	96	ND(14.7) J	--	--	4.4 J	--	--

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	C5-C8, Aliphatic, Adjusted (ug/m³)	C9-C10, Aromatic, Adjusted (ug/m³)	C9-C12, Aliphatic, Adjusted (ug/m³)	Benzene (ug/m³)	Naphthalene (ug/m³)	1,3-Butadiene (ug/m³)	n-Butyl-benzene (ug/m³)	sec-Butyl-benzene (ug/m³)	tert-Butyl-benzene (ug/m³)	Cyclohexane (ug/m³)	Decane (ug/m³)	1,2-Dibromo-ethane (ug/m³)	1,2-Dichloro-ethane (ug/m³)	Ethyl-benzene (ug/m³)	4-Ethyltoluene (ug/m³)	Heptane (ug/m³)
SIVW cont.	SIVW5	nested well	5/13/06	5.3	5120 J	ND(48)	460 J	19.6	ND(5.24)	14.9 R	ND(1.1)	1.51	2.39	80.3 J	12.2	--	--	7.17	--	--
	SIVW5	nested well	5/13/06	10.3	3600 J	ND(48) J	359 J	11.9 J	ND(5.24) J	4.91 R	ND(1.1) J	ND(1.1) J	1.49 J	47.6 J	ND(11.6) J	--	--	2.81 J	--	--
	SIVW5	nested well	5/13/06	14.3	2760 J	ND(48) J	328 J	10.2 J	ND(5.24) J	4.66 R	ND(1.1) J	ND(1.1) J	1.3 J	41.2 J	ND(11.6) J	--	--	2.45 J	--	--
	SIVW5 Dup	nested well	5/13/06	5.3	3160 J	ND(48)	310 J	14.7	ND(5.24)	7.14 R	ND(1.1)	1.77	2.8	48.9 J	ND(11.6)	--	--	6.46	--	--
	SIVW5 Dup	nested well	5/13/06	10.3	3700 J	53.2 J	359 J	16 J	ND(5.24) J	8.93 R	1.36 J	2.05 J	3.2 J	55 J	ND(11.6) J	--	--	7.38 J	--	--
	SIVW5	nested well	9/19/06	5.3	49.8	ND(24)	83.4	2.18	ND(2.62)	ND(0.442)	ND(0.548)	ND(0.548)	ND(0.548)	ND(0.688)	ND(5.82) J	--	--	0.65	--	--
	SIVW5	nested well	9/19/06	10.3	53	ND(32)	ND(37.3)	ND(2.13)	ND(3.49)	ND(0.589)	ND(0.731)	ND(0.731)	ND(0.731)	ND(0.917)	ND(7.76) J	--	--	ND(0.578)	--	--
	SIVW6	nested well	5/08/08	5	1300	ND(53)	90	9.6	ND(2.7)	7.8	ND(2.7)	ND(2.7)	ND(2.7)	19	3.5	ND(2.7)	ND(2.7)	ND(2.7)	--	--
	SIVW6	nested well	5/08/08	10	1700	58	250	9.3	ND(2.7)	21	ND(2.7)	ND(2.7)	ND(2.7)	21	4.9	ND(2.7)	ND(2.7)	ND(2.7)	--	--
	SIVW6	nested well	5/08/08	15	5700	ND(50)	220	20	ND(2.5)	22	ND(2.5)	ND(2.5)	ND(2.5)	41	7.8	ND(2.5)	ND(2.5)	ND(2.5)	--	--
	SIVW6 Dup	nested well	5/08/08	0	1400	ND(52)	250	10	ND(2.6)	8.6	ND(2.6)	ND(2.6)	ND(2.6)	19	3.3	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SIVW7	nested well	5/08/08	5	890	ND(52)	91	7.9	ND(2.6)	4.3	ND(2.6)	ND(2.6)	ND(2.6)	15	3.1	ND(2.6)	ND(2.6)	ND(2.6)	--	--
	SIVW7	nested well	5/08/08	15	8800	ND(63)	370	15	ND(3.2)	44	ND(3.2)	ND(3.2)	ND(3.2)	130	3.8	ND(3.2)	ND(3.2)	ND(3.2)	--	--
MDEQ Indoor Air Screening Criteria					183	52	52	0.53	0.12	0.14	NA	NA	NA	N	NA	0.01	0.16	1.67	NA	NA
Regional Screening Level Residential Air Screening Level					NA	NA	NA	NA	NA	NA	NA	NA	NA	6300	NA	NA	NA	NA	NA	NA

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
Outdoor Air	OA1	outdoor air	5/08/06	0	1.53	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	29.7	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA1	outdoor air	5/09/06	0	0.786	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	24.8	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA1	outdoor air	5/10/06	0	0.896 J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	2.16 J	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	OA1	outdoor air	5/11/06	0	0.807 J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	1.84 J	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	OA1	outdoor air	5/12/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	5.52	ND(0.426)	6.93	ND(0.491)	ND(0.491)	6.55	1.8
	OA1	outdoor air	5/13/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	12.3 J	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA1 Dup	outdoor air	5/13/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	23.1 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	OA1	outdoor air	5/15/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	34.8	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA1	outdoor air	5/16/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	57.7	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA1	outdoor air	9/18/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.04 J	ND(0.491) J	ND(0.491) J	1 J	ND(0.434) J
	OA1	outdoor air	9/19/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	ND(0.376) J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	OA1	outdoor air	9/20/06	0	ND(0.704) J	0.706 J	ND(1.8) J	--	--	--	1.4 J	ND(0.426) J	0.942 J	1.03 J	ND(0.491) J	3.05 J	1.05 J
	OA1	outdoor air	9/21/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.382 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	OA1	outdoor air	10/05/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.604	ND(0.491)	ND(0.491)	1.36	ND(0.434)
	OA1	outdoor air	10/06/06	0	ND(0.704)	0.638	ND(1.8)	--	--	--	1.15	ND(0.426)	0.744	0.983	0.589	6.54	1.93
	OA1	outdoor air	10/07/06	0	22.3 J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	1.38 J	ND(0.491)	ND(0.491)	1.06 J	ND(0.434)
	OA1 Dup	outdoor air	10/07/06	0	ND(0.704) J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.556 J	ND(0.491)	ND(0.491)	1.49 J	0.576
	OA1	outdoor air	1/25/07	0	1.64	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	0.772	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	OA1 Dup	outdoor air	1/25/07	0	1.48	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	ND(0.753)	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	OA1	outdoor air	1/26/07	0	1.95	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	1.31	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	OA1	outdoor air	5/06/08	0	ND(0.82)	ND(0.82)	ND(0.82)	--	--	--	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	OA1	outdoor air	5/07/08	0	ND(0.82)	ND(0.82)	ND(0.82)	--	--	--	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	OA1 Dup	outdoor air	5/07/08	0	ND(0.93)	ND(0.93)	ND(0.93)	--	--	--	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)
	OA1	outdoor air	5/08/08	0	ND(0.86)	ND(0.86)	ND(0.86)	--	--	--	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	OA1	outdoor air	5/08/08	0	ND(0.77)	ND(0.77)	ND(0.77)	--	--	--	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	OA1	outdoor air	3/14/09	0	ND(0.64)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)
	OA1	outdoor air	3/15/09	0	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)
	OA1	outdoor air	3/16/09	0	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)
	OA1	outdoor air	3/17/09	0	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)
	OA1	outdoor air	3/18/09	0	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)
	OA1	outdoor air	3/19/09	0	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78) J	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	OA1	outdoor air	3/20/09	0	1.2	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	1.3	ND(0.97)	ND(0.97)	ND(0.97)
	OA1	outdoor air	3/21/09	0	ND(1.1)	ND(1.1)	ND(0.21)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)
	OA1	outdoor air	6/03/09	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.3	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	OA1	outdoor air	7/02/09	0	ND(0.81)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)
	OA2	outdoor air	5/08/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	12.1	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	5/09/06	0	1.44	0.711	ND(1.8)	--	--	--	1.09	0.592	25.6	0.694	0.524	1.53	0.7
	OA2	outdoor air	5/10/06	0	1.38 J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	3.71 J	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	5/11/06	0	1.42 J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	5.94 J	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	OA2 Dup	outdoor air	5/11/06	0	0.734 J	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	15.8 J	0.924 J	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	5/12/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	16.2	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	5/13/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	3.43	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	5/15/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	11.3 J	ND(0.491) J	ND(0.491) J	2.9 J	ND(0.434) J
	OA2	outdoor air	5/16/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	26.9	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	9/18/06	0	1.03 J	2.52 J	ND(1.8) J	--	--	--	4.79 J	ND(0.426) J	0.797 J	3.24 J	1.54 J	3.68 J	1.36 J
	OA2	outdoor air	9/19/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.451 J	ND(0.491) J	ND(0.491) J	0.915 J	ND(0.434) J
	OA2	outdoor air	9/20/06	0	1 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.02 J	ND(0.491) J	ND(0.491) J	2.15 J	0.599 J
	OA2 Dup	outdoor air	9/20/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.822 J	ND(0.491) J	ND(0.491) J	5.35 J	1.48 J
	OA2	outdoor air	9/21/06	0	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	0.491 J	ND(0.426) J	1.23 J	ND(0.491) J	ND(0.491) J	1.01 J	ND(0.434) J
	OA2	outdoor air	10/05/06	0	1.02	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	ND(0.376)	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	10/06/06	0	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.572	ND(0.491)	ND(0.491)	ND(0.868)	ND(0.434)
	OA2	outdoor air	10/07/06	0	10.6	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.865	ND(0.491)	ND(0.491)	0.947	ND(0.434)
	OA2	outdoor air	1/25/07	0	ND(0.704)	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	ND(0.753)	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	OA2	outdoor air	1/26/07	0	1.37	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	0.892	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	OA2	outdoor air	4/23/08	0	ND(0.74)	ND(0.74)	ND(0.74)	--	--	--	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)
	OA2	outdoor air	5/06/08	0	ND(0.84)	ND(0.84)	ND(0.84)	--	--	--	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
Outdoor Air	OA2	outdoor air	5/07/08	0	ND(0.8)	ND(0.8)	ND(0.8)	--	--	--	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)
cont.	OA2	outdoor air	5/08/08	0	ND(0.76)	ND(0.76)	ND(0.76)	--	--	--	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)
	OA2	outdoor air	5/08/08	0	ND(0.78)	ND(0.78)	ND(0.78)	--	--	--	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	OA2	outdoor air	3/14/09	0	ND(1.1)	ND(1.1)	ND(0.22)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)
	OA2	outdoor air	3/15/09	0	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)
	OA2	outdoor air	3/16/09	0	ND(0.96)	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)
	OA2	outdoor air	3/17/09	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	OA2	outdoor air	3/18/09	0	0.95	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	0.84	0.88	ND(0.82)	ND(0.82)
	OA2	outdoor air	3/19/09	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77) J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	OA2	outdoor air	3/20/09	0	1.6	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)
	OA2	outdoor air	3/21/09	0	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)
	OA3	outdoor air	3/14/09	0	1.3	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	OA3	outdoor air	3/15/09	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	OA3	outdoor air	3/16/09	0	13	ND(0.97)	ND(0.19)	1.9	3.4	ND(0.97)	ND(0.97)	ND(0.97)	1.1	ND(0.97)	ND(0.97)	1.9	ND(0.97)
	OA3	outdoor air	3/17/09	0	3.5	ND(0.87)	ND(0.17)	1.1	1.2	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
	OA3	outdoor air	3/18/09	0	ND(0.69)	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.69)	0.69	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)
	OA3	outdoor air	3/19/09	0	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85) J	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	OA3	outdoor air	3/20/09	0	1.4	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)
	OA3	outdoor air	3/21/09	0	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	OA4	outdoor air	1/23/10	0	0.93	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	OA4	outdoor air	1/24/10	0	0.79	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	OA4	outdoor air	1/25/10	0	0.9	ND(0.6)	ND(0.12)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)
	OA4	outdoor air	1/26/10	0	1	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72) J	ND(0.72)	ND(0.72)	0.78	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)
	OA4	outdoor air	1/27/10	0	3.4	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75) J	ND(0.75)	ND(0.75)	1.1	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)
	OA4	outdoor air	1/28/10	0	2.4	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	1.5	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)
	OA4	outdoor air	1/29/10	0	1.4	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79) J	ND(0.79)	ND(0.79)	0.98	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	OA4	outdoor air	1/30/10	0	1.3	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7) J	ND(0.7)	ND(0.7)	0.84	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)
	OA4	outdoor air	2/01/10	0	1.9	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89) J	ND(0.89)	ND(0.89)	1.4	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)
SI 01	SI1-IA	indoor air	3/18/09	0	11	ND(0.85)	ND(0.17)	4	3.1	2.5 J	ND(0.85)	ND(0.85)	7.3	3.4	1.4	6.5	1.9
	SI1-IA	indoor air	1/28/10	0	3.4	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	8.1 J	ND(0.89)	ND(0.89)	4.6	ND(0.89)	ND(0.89)	1.9	ND(0.89)
	SI1-GA	garage air	3/18/09	0	20	ND(0.77)	ND(0.15)	2.8	2.9	ND(0.77)	0.95	ND(0.77)	20	4.7	1.5	14	4.2
	SI1-GA	garage air	1/28/10	0	13	ND(0.64)	ND(0.13)	ND(0.64)	0.81	ND(0.64) J	0.65	1.5	20	2.9	0.91	11	3.5
	SI1-CS	crawlspace	3/18/09	0	13	ND(0.84)	ND(0.17)	2.6	2.6	ND(0.84)	ND(0.84)	ND(0.84)	9.8	2.8	1	6.8	2
	SI1-CS	crawlspace	1/28/10	0	2.8	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84) J	ND(0.84)	ND(0.84)	1.3	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)
	SINS1	near slab	5/09/06	4.5	127	ND(0.982)	ND(3.6)	--	--	--	1.08	ND(0.851)	87.1	2.72	2.3	5.65	3.57
	SINS1	near slab	9/20/06	4.5	ND(7.04) J	ND(4.91) J	ND(18) J	--	--	--	ND(4.91) J	ND(4.26) J	ND(3.76) J	ND(4.91) J	ND(4.91) J	ND(8.68) J	ND(4.34) J
	SINS1 Dup	near slab	9/20/06	4.5	ND(7.04) J	ND(4.91) J	ND(18) J	--	--	--	ND(4.91) J	ND(4.26) J	ND(3.76) J	ND(4.91) J	ND(4.91) J	ND(8.68) J	ND(4.34) J
SI 02	SIIA2	indoor air	1/26/07	0	3.23	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	5.17	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SIIA2	indoor air	4/23/08	0	2.3	ND(0.9)	ND(0.9)	--	--	--	ND(0.9)	ND(0.9)	2.8	ND(0.9)	ND(0.9)	0.94	ND(0.9)
	SICS2	crawlspace	1/26/07	0	1.32 J	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	0.956 J	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SICS2 Dup	crawlspace	1/26/07	0	2.32 J	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	1.38 J	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SICS2	crawlspace	4/23/08	0	ND(0.89)	ND(0.89)	ND(0.89)	--	--	--	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)
	SINS2	near slab	5/12/06	6.5	85900	967	ND(2690) J	--	--	--	898	ND(635) J	3250	1120	1410	5750	1170
	SINS2	near slab	5/12/06	11.5	2010000	ND(1870)	ND(6870)	--	--	--	ND(1870)	ND(1620)	49500	1960	2380	28400	8480
	SINS2	near slab	5/12/06	16.5	939000	ND(1880) J	ND(6910) J	--	--	--	ND(1880) J	ND(1630) J	5150	ND(1880) J	ND(1880) J	9190	1710
	SINS2	near slab	10/06/06	6.5	430 J	ND(12.3) J	ND(45) J	--	--	--	ND(12.3) J	ND(10.6) J	ND(9.41) J	ND(12.3) J	29.6 J	ND(21.7) J	ND(10.8) J
	SINS2	near slab	10/06/06	11.5	209000 J	ND(486) J	ND(1780) J	--	--	--	ND(486) J	ND(422) J	7360 J	514 J	ND(486) J	4830 J	2070 J
	SINS2	near slab	10/06/06	16.5	271 J	75 J	ND(27.5) J	--	--	--	111 J	ND(6.5) J	160 J	507 J	777 J	416 J	458 J
	SINS2 Dup	near slab	10/06/06	11.5	1940 J	ND(4.91)	ND(18)	--	--	--	ND(4.91)	ND(4.26)	57.6	ND(4.91) J	ND(4.91)	33.2 J	14.1 J

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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 02 cont.	SINS2	near slab	1/26/07	6.5	8.53	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	1.26	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SINS2	near slab	1/26/07	11.5	5990 R	ND(24.6) R	ND(45) R	--	--	--	ND(61.4) R	ND(53.2) R	1860 R	ND(61.4) R	ND(61.4) R	216 R	62.8 R
	SINS2	near slab	1/26/07	16.5	179000 J	ND(585)	ND(1070)	--	--	--	ND(1460)	ND(1270) J	538 J	ND(1460)	ND(1460)	ND(1030)	ND(516)
	SINS2 Dup	near slab	1/26/07	16.5	5100000 J	ND(1530)	ND(2810)	--	--	--	ND(3840)	ND(3320) J	1570 J	ND(3840)	ND(3840)	ND(2710)	ND(1360)
	SINS2	near slab	6/06/07	6.5	5.89 J	ND(3.93)	ND(7.2)	--	--	--	ND(9.82)	ND(8.51)	ND(3.01) J	ND(9.82)	ND(9.82)	ND(6.94)	ND(3.47)
	SINS2	near slab	5/05/08	6.5	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	2.8	ND(2.7)	ND(2.7)
	SIOAH2	outdoor air	1/26/07	0	ND(0.704)	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	ND(0.753)	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SIOAH2	outdoor air	4/23/08	0	ND(0.92)	ND(0.92)	ND(0.92)	--	--	--	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)
SI 03	SIIA3U1	indoor air	7/24/08	0	1.3	ND(0.85)	ND(0.85)	--	--	--	ND(0.85)	3.1	31	ND(0.85)	ND(0.85)	9.7	3.1
	SIIA3U2	indoor air	7/24/08	0	1.3	ND(0.92)	ND(0.92)	--	--	--	ND(0.92)	3.2	31	ND(0.92)	ND(0.92)	9.8	3.1
	SIIA3U2 Dup	indoor air	7/24/08	0	1.3	ND(0.82)	ND(0.82)	--	--	--	ND(0.82)	3.1	31	ND(0.82)	ND(0.82)	9.8	3.1
	SIIA3B1	indoor air	7/24/08	0	1	ND(0.93)	ND(0.93)	--	--	--	ND(0.93)	6.5	20	ND(0.93)	ND(0.93)	17	5.8
	SIIA3B2	indoor air	7/24/08	0	1.3	ND(0.77)	ND(0.77)	--	--	--	ND(0.77)	9.1	25	ND(0.77)	ND(0.77)	23	7.6
	SIIA3	indoor air	5/06/08	0	2.1	ND(1)	ND(1)	--	--	--	ND(1)	4.4	30	ND(1)	ND(1)	29	9.7
	SIIA3 Dup	indoor air	5/06/08	0	1.8	ND(0.91)	ND(0.91)	--	--	--	ND(0.91)	4.6	30	ND(0.91)	ND(0.91)	29	9.8
	SI3-IA1	indoor air	3/15/09	0	250	ND(2.5)	ND(0.5)	ND(2.5)	ND(2.5)	9.9	ND(2.5)	2.5	13	ND(2.5)	ND(2.5)	4.7	ND(2.5)
	SI3-IA1	indoor air	6/03/09	0	0.97	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	1.2	ND(0.85)	ND(0.85)	7.2	ND(0.85)	ND(0.85)	1.1	ND(0.85)
	SI3-IA1	indoor air	7/02/09	0	ND(0.98)	ND(0.98)	ND(0.2)	ND(0.98)	ND(0.98)	4.9 J	ND(0.98)	ND(0.98)	12	ND(0.98)	ND(0.98)	8.8	2
	SI3-IA1	indoor air	1/25/10	0	2.4	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	4 J	ND(0.89)	1.3	20	ND(0.89)	ND(0.89)	9.6	2.2
	SI3-IA1	indoor air	9/25/10	0	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	3.5	ND(0.85)	ND(0.85)	23	ND(0.85)	ND(0.85)	15	3.1
	SI3-IA1	indoor air	12/03/10	0	4.2	ND(0.85)	ND(0.17)	ND(0.85)	0.85	4.9	ND(0.85)	0.9	17	ND(0.85)	ND(0.85)	13	2.7
	SI3-IA1	indoor air	4/12/11	0	1.1	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	3.2	ND(0.86)	0.99	9.5	ND(0.86)	ND(0.86)	10	2.3
	SI3-IA1 Dup	indoor air	2/09/12	0	ND(0.94)	ND(0.94)	ND(0.19)	ND(0.94)	ND(0.94)	10	ND(0.94)	ND(0.94)	5.2	ND(0.94)	ND(0.94)	8	1.8
	SI3-IA1	indoor air	2/09/12	0	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.91)	13	ND(0.91)	ND(0.91)	5.1	ND(0.91)	ND(0.91)	8.2	1.8
	SI3-IA2	indoor air	3/15/09	0	150	ND(2.8)	ND(0.56)	ND(2.8)	5	30	ND(2.8)	ND(2.8)	31	ND(2.8)	ND(2.8)	4.4	ND(2.8)
	SI3-IA2	indoor air	6/03/09	0	1.8	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	1.7	ND(0.72)	1.5	5.7	ND(0.72)	ND(0.72)	1.7	ND(0.72)
	SI3-IA2	indoor air	7/02/09	0	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.76)	5.9	ND(0.76)	1.5	9	ND(0.76)	ND(0.76)	9.6	2.6
	SI3-IA2	indoor air	9/25/10	0	ND(0.83)	ND(0.83)	ND(0.17)	1.7	ND(0.83)	2.5	ND(0.83)	1.5	13	0.93	ND(0.83)	8.8	2.1
	SI3-IA2	indoor air	12/03/10	0	4.3	ND(1.2)	ND(0.25)	ND(1.2)	ND(1.2)	3.8	ND(1.2)	6.3	16	ND(1.2)	ND(1.2)	11	2.4
	SI3-IA2	indoor air	2/09/12	0	0.93	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.88)	20	ND(0.88)	ND(0.88)	7.2	ND(0.88)	ND(0.88)	14	2.9
	SIG3	garage air	5/06/08	0	ND(1.1)	ND(1.1)	ND(1.1)	--	--	--	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	1.7	ND(1.1)
	SIG3	garage air	7/24/08	0	ND(0.85)	ND(0.85)	ND(0.85)	--	--	--	ND(0.85)	ND(0.85)	7.7	ND(0.85)	ND(0.85)	4.9	1.3
	SI3-GA	garage air	3/15/09	0	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	2.8	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)
	SI3-GA	garage air	6/03/09	0	ND(9.9)	ND(9.9)	ND(2)	ND(9.9)	ND(9.9)	ND(9.9)	ND(9.9)	ND(9.9)	44	ND(9.9)	ND(9.9)	23	ND(9.9)
	SI3-GA	garage air	7/02/09	0	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	10	ND(0.89)	ND(0.89)	150	42
	SI3-GA	garage air	1/25/10	0	2.2	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82) J	ND(0.82)	ND(0.82)	5.9	ND(0.82)	ND(0.82)	3.6	1.1
	SI3-GA	garage air	9/25/10	0	ND(0.64)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)
	SI3-GA	garage air	12/03/10	0	4.4	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	5.2	0.94	ND(0.75)	3.3	1.1
	SI3-GA	garage air	4/12/11	0	4.8	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	12	2.6	0.78	8.1	2.6
	SI3-GA	garage air	2/09/12	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.2	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SISS3-1	sub slab	5/05/08	0	ND(2.6) R	ND(2.6) R	ND(2.6) R	--	--	--	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	ND(2.6) R	11 R	4 R
	SISS3-1 Dup	sub slab	5/05/08	0	33 R	ND(2.6) R	ND(2.6) R	--	--	--	ND(2.6) R	ND(2.6) R	3.6 R	ND(2.6) R	ND(2.6) R	17 R	6.3 R
	SISS3-2	sub slab	5/05/08	0	17	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	3	ND(2.6)
	SISS3-3	sub slab	5/05/08	0	ND(2.8)	ND(2.8)	ND(2.8)	--	--	--	ND(2.8)	ND(2.8)	4.2	ND(2.8)	ND(2.8)	6.6	ND(2.8)
	SISS3-4	sub slab	7/23/08	0	ND(2.4)	ND(2.4)	ND(2.4)	--	--	--	ND(2.4)	ND(2.4)	8.3	2.9	ND(2.4)	6	ND(2.4)
	SISS3-5	sub slab	7/23/08	0	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	3.6	ND(2.7)	ND(2.7)	7	ND(2.7)
	SI3-SS1	sub slab	3/16/09	0	10	ND(3.1)	ND(0.61)	6	5.6	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	9.2	5.4
	SI3-SS1	sub slab	6/02/09	0	1.3	ND(0.91)	ND(0.18)	1.5	1.1	1.2	ND(0.91)	ND(0.91)	2.2	ND(0.91)	ND(0.91)	1.5	ND(0.91)
	SI3-SS1	sub slab	7/02/09	0	1.2	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	10	ND(0.85)	1.1	11	ND(0.85)	ND(0.85)	8.2	2.3
	SI3-SS1	sub slab	1/26/10	0	2.3	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	6.1 J	ND(0.82)	ND(0.82)	10	ND(0.82)	ND(0.82)	5.7	1.4
	SI3-SS1	sub slab	9/25/10	0	9.9	ND(0.98)	ND(0.2)	ND(0.98)	ND(0.98)	2.9	ND(0.98)	ND(0.98)	11	ND(0.98)	ND(0.98)	6.7	1.7
	SI3-SS1	sub slab	12/02/10	0	17	ND(0.82)	ND(0.16)	1	4.6	3.5	ND(0.82)	ND(0.82)	14	ND(0.82)	ND(0.82)	7.4	1.8
	SI3-SS1	sub slab	4/11/11	0	1.2	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	1.5	ND(0.85)	ND(0.85)	0.95	ND(0.85)	ND(0.85)	0.91	ND(0.85)
	SI3-SS1	sub slab	2/09/12	0	1.5	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.84)	3.7	ND(0.84)	ND(0.84)	4.2	ND(0.84)	ND(0.84)	5.2	1.2
	SI3-SS2	sub slab	3/16/09	0	3.3	ND(2.9)	ND(0.58)	ND(2.9)	ND(2.9)	3.6	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 03 cont.	SI3-SS2	sub slab	6/02/09	0	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	2.4	ND(0.87)	ND(0.87)	0.92	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
	SI3-SS2	sub slab	7/02/09	0	ND(0.81)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.81)	1.2	ND(0.81)	ND(0.81)	0.95	3.2	ND(0.81)	ND(0.81)	ND(0.81)
	SI3-SS2	sub slab	1/26/10	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	52 J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	SI3-SS2	sub slab	9/25/10	0	82	ND(0.79)	ND(0.16)	0.96	3.4	1.2	ND(0.79)	ND(0.79)	0.85	ND(0.79)	ND(0.79)	0.85	ND(0.79)
	SI3-SS2	sub slab	12/02/10	0	15	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)
	SI3-SS2	sub slab	4/11/11	0	410	ND(2.4)	ND(0.48)	ND(2.4)	ND(2.4)	9.4	ND(2.4)	4	11	ND(2.4)	ND(2.4)	11	2.9
	SI3-SS2	sub slab	2/09/12	0	2.1	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	5.5	ND(0.79)	ND(0.79)	2.4	0.98
	SINS3	near slab	5/12/06	6.5	603	57.4	ND(45) J	--	--	--	ND(12.3) J	ND(10.6) J	155	138	141	328	283
	SINS3	near slab	5/12/06	11.5	156 J	4.45 J	ND(3.6) J	--	--	--	4.56 J	ND(0.851) J	38.2 J	5.63 J	ND(0.982) J	33.9 J	16.6 J
	SINS3	near slab	10/05/06	6.5	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.422 J	0.685 J	ND(0.491) J	ND(0.868) J	0.548 J
	SINS3	near slab	10/05/06	11.5	7.69 J	4.79 J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	20.8 J	47.8 J	67 J	67.6 J	48.2 J
	SINS3	near slab	5/05/08	6.5	47	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SINS3	near slab	5/05/08	11.5	3000000	ND(21000)	ND(21000)	--	--	--	ND(21000)	ND(21000)	ND(21000)	ND(21000)	ND(21000)	ND(21000)	ND(21000)
	SIOAH3	outdoor air	5/06/08	0	ND(0.92)	ND(0.92)	ND(0.92)	--	--	--	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)
	SIOAH3	outdoor air	7/24/08	0	ND(0.77)	ND(0.77)	ND(0.77)	--	--	--	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SIOAH3	outdoor air	9/25/10	0	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SIOAH3	outdoor air	12/03/10	0	1.8	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	SIOAH3	outdoor air	4/12/11	0	ND(0.9)	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	2.6	ND(0.9)	1.5	ND(0.9)
	SI3-NS	near slab	3/19/09	6.5	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)
	SI3-NS	near slab	3/19/09	11.5	5100000	ND(35000)	ND(7100)	38000	170000 J	ND(35000)	ND(35000)	ND(35000)	40000	ND(35000)	ND(35000)	ND(35000)	ND(35000)
	SI3-NS Dup	near slab	3/19/09	11.5	5200000	ND(36000)	ND(7200)	ND(36000)	130000 J	ND(36000)	ND(36000)	ND(36000)	ND(36000)	ND(36000)	ND(36000)	ND(36000)	ND(36000)
	SI3-NS	near slab	9/24/10	6.5	84000	ND(430)	ND(85)	ND(430)	ND(430)	ND(430)	ND(430)	ND(430)	ND(430)	ND(430)	ND(430)	ND(430)	ND(430)
	SI3-NS	near slab	9/24/10	11.5	5300000	ND(40000)	ND(8000)	41000	240000	ND(40000)	ND(40000)	ND(40000)	ND(40000)	ND(40000)	ND(40000)	ND(40000)	ND(40000)
	SI3-NS	near slab	12/02/10	6.5	11	ND(2.2)	ND(0.43)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)
	SI3-NS	near slab	12/02/10	11.5	10000000	ND(16000)	ND(3200)	39000	410000	ND(16000)	ND(16000)	ND(16000)	29000	ND(16000)	ND(16000)	27000	ND(16000)
	SI3-NS	near slab	4/11/11	6.5	2	ND(2)	ND(0.41)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
	SI3-NS	near slab	4/11/11	11.5	5500000	ND(28000)	ND(5600)	64000	330000	ND(28000)	ND(28000)	ND(28000)	ND(28000)	ND(28000)	ND(28000)	ND(28000)	ND(28000)
	SI3-NS	near slab	2/08/12	6.5	ND(2.1)	ND(2.1)	ND(0.42)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)
	SI3-NS	near slab	2/08/12	11.5	8000000	ND(56000)	ND(11000)	ND(56000)	480000	ND(56000)	ND(56000)	ND(56000)	ND(56000)	ND(56000)	ND(56000)	ND(56000)	ND(56000)
	SI3-FF	indoor air	1/25/10	0	2.3	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.95)	4.2 J	ND(0.95)	1	20	ND(0.95)	ND(0.95)	10	2.3
SI 04	SIIA4	indoor air	4/23/08	0	25	ND(0.68)	ND(0.68)	--	--	--	0.96	ND(0.68)	43	3.7	1.2	21	5.4
	SIIA4	indoor air	5/21/08	0	ND(1.1)	ND(1.1)	ND(1.1)	--	--	--	ND(1.1)	ND(1.1)	6.9	ND(1.1)	ND(1.1)	1.6	ND(1.1)
	SI4-IA	indoor air	3/15/09	0	ND(0.82)	ND(0.82)	ND(0.16) J	ND(0.82)	ND(0.82)	6.9	ND(0.82)	ND(0.82)	7	1.1	ND(0.82)	1.3 J	ND(0.82)
	SI4-IA Dup	indoor air	3/15/09	0	ND(0.86)	ND(0.86)	0.38 J	ND(0.86)	ND(0.86)	8.3	ND(0.86)	ND(0.86)	8.5	1.3	ND(0.86)	1.7 J	ND(0.86)
	SI4-IA	indoor air	1/23/10	0	1.3	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	8.8	ND(0.85)	1.9	7.8	1.3	ND(0.85)	1.9	ND(0.85)
	SIG4	garage air	4/23/08	0	360	ND(4.2)	ND(4.2)	--	--	--	15	ND(4.2)	650	61	18	370	96
	SIG4	garage air	5/21/08	0	15	ND(0.89)	ND(0.89)	--	--	--	1.5	ND(0.89)	21	9.5	2.6	17	5.5
	SI4-GA	garage air	3/15/09	0	4.6	ND(0.86)	ND(0.17)	3.1	1.2	5.6 J	0.88	ND(0.86)	9	6	1.7	6.8	2.4
	SI4-GA	garage air	1/23/10	0	3.2	ND(0.84)	ND(0.17)	1.5	ND(0.84)	5.3	1	ND(0.84)	11	7.6	2.2	9.6	3.5
	SISS4-1	sub slab	4/23/08	0	4.4	ND(2.8)	ND(2.8)	--	--	--	ND(2.8)	ND(2.8)	14	ND(2.8)	ND(2.8)	9.3	3
	SISS4-2	sub slab	4/23/08	0	ND(2.4)	ND(2.4)	ND(2.4)	--	--	--	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)
	SI4-SS1	sub slab	3/15/09	0	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.76)	1.4 J	ND(0.76)	ND(0.76)	2.2	ND(0.76)	ND(0.76)	1.2	ND(0.76)
	SI4-SS1	sub slab	1/24/10	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	3.4	ND(0.77)	ND(0.77)	0.99	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SI4-SS2	sub slab	3/15/09	0	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.71)	2.7 J	ND(0.71)	ND(0.71)	3	ND(0.71)	ND(0.71)	1.1	ND(0.71)
	SI4-SS2	sub slab	1/24/10	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	10	ND(0.79)	ND(0.79)	1.1	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SINS4	near slab	5/16/06	6.3	134	4.55	ND(3.6)	--	--	--	5.1	ND(0.851)	23.9	1.08	2.25	12.8	3.94
	SINS4	near slab	5/16/06	11.3	111	3.89	ND(3.6)	--	--	--	4.29	ND(0.851)	18	ND(0.982)	2.12	13.4	4.24
	SINS4	near slab	5/16/06	16.3	163	7.71	ND(3.6)	--	--	--	8.72	ND(0.851)	43.3	1.13	3.53	25.8	8.26
	SINS4	near slab	5/16/06	21.3	1520	ND(12.3) J	ND(45) J	--	--	--	ND(12.3) J	ND(10.6) J	35.6	ND(12.3) J	ND(12.3) J	ND(21.7) J	ND(10.8) J
	SINS4 Dup	near slab	5/16/06	16.3	290	6.42	ND(3.6)	--	--	--	7.3	ND(0.851)	31.9	1.21	3.14	39.6	11.6
	SINS4	near slab	10/06/06	6.3	10.4 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	11 J	0.534 J	ND(0.491) J	8.08 J	2.82 J
	SINS4	near slab	10/06/06	11.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.19 J	ND(0.491) J	ND(0.491) J	1.8 J	0.71 J
	SINS4	near slab	10/06/06	16.3	1.26 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	5.76 J	ND(0.491) J	ND(0.491) J	7.34 J	2.69 J

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 04 cont.	SINS4	near slab	10/06/06	21.3	13500 J	ND(24.6) J	ND(90) J	--	--	--	ND(24.6) J	33.3 J	494 J	64.7 J	24.9 J	178 J	81.1 J
	SINS4	near slab	5/05/08	6.3	ND(2.9)	ND(2.9)	ND(2.9)	--	--	--	ND(2.9)	ND(2.9)	3	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)
	SINS4	near slab	5/05/08	11.3	8.3	ND(3.1)	ND(3.1)	--	--	--	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)
	SINS4	near slab	5/05/08	16.3	37	ND(4.8)	ND(4.8)	--	--	--	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)
	SINS4	near slab	5/05/08	21.3	110	ND(9.7)	ND(9.7)	--	--	--	ND(9.7)	ND(9.7)	ND(9.7)	ND(9.7)	ND(9.7)	ND(9.7)	ND(9.7)
	SIOAH4	outdoor air	4/23/08	0	ND(0.77)	ND(0.77)	ND(0.77)	--	--	--	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SIOAH4	outdoor air	5/21/08	0	ND(0.9)	ND(0.9)	ND(0.9)	--	--	--	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)
SI 05	SIIA5	indoor air	1/26/07	0	2.72	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	2.94	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SIIA5	indoor air	4/24/08	0	ND(0.77)	ND(0.77)	ND(0.77)	--	--	--	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SIG5	garage air	4/23/08	0	ND(0.77)	ND(0.77)	ND(0.77)	--	--	--	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SICS5	crawlspace	1/26/07	0	1.34	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	1.01	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SICS5	crawlspace	4/24/08	0	ND(0.93)	ND(0.93)	ND(0.93)	--	--	--	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)
	SINS5	near slab	5/12/06	4.3	169000	1030	ND(1300) J	--	--	--	1010	ND(308) J	16000	1050	2800	8480	4340
	SINS5	near slab	5/12/06	9	32200 J	295 J	17100 J	--	--	--	256 J	ND(134) J	3620 J	263 J	ND(155) J	2580 J	1170 J
	SINS5	near slab	10/06/06	4.3	3.82 J	1.34 J	ND(1.8) J	--	--	--	1.83 J	ND(0.426) J	2.22 J	8.7 J	13.6 J	6.8 J	8.34 J
	SINS5	near slab	10/06/06	9	6.93 J	1.44 J	ND(1.8) J	--	--	--	3.21 J	ND(0.426) J	3.93 J	12.6 J	9.46 J	9.33 J	9.19 J
	SINS5	near slab	1/26/07	4.3	6.53	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	7.67	3.78	2.68	4.4	5.64
	SINS5	near slab	1/26/07	9	3.9 R	ND(0.982) R	ND(1.8) R	--	--	--	ND(2.46) R	ND(2.13) R	1.38 R	ND(2.46) R	ND(2.46) R	ND(1.74) R	1.34 R
	SINS5	near slab	6/06/07	9	19 J	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13)	1.48 J	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SINS5	near slab	5/06/08	4.3	170	ND(2.5)	ND(2.5)	--	--	--	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
	SINS5	near slab	5/06/08	9	ND(2.6)	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SINS5 Dup	near slab	5/06/08	9	ND(2.6)	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SIOAH5	outdoor air	1/26/07	0	ND(0.704)	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	1.84	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SIOAH5	outdoor air	4/24/08	0	ND(0.9)	ND(0.9)	ND(0.9)	--	--	--	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)
SI 06	SI6-IA	indoor air	3/18/09	0	4.8	ND(0.87)	ND(0.17)	2.2	1.4	3.4	ND(0.87)	ND(0.87)	28	4.1	1.4	13	3.9
	SI6-IA Dup	indoor air	3/18/09	0	5.2	ND(0.85)	ND(0.17)	2.4	1.5	3.2	ND(0.85)	ND(0.85)	31	4.4	1.4	14	4.3
	SI6-SS1	sub slab	3/18/09	0	ND(0.69)	0.95	ND(0.14)	ND(0.69)	ND(0.69)	1.6	ND(0.69)	ND(0.69)	2.7	ND(0.69)	ND(0.69)	0.89	ND(0.69)
	SI6-SS2	sub slab	3/18/09	0	ND(0.67)	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.67)	1.7	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
	SINS6	near slab	5/12/06	4.5	61.8	0.516	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	25	ND(0.491)	ND(0.491)	2.9	0.899
	SINS6	near slab	5/12/06	8.5	42	4.73	ND(1.8)	--	--	--	3.56	ND(0.426)	28.6	ND(0.491)	1.35	4.9	1.53
	SINS6	near slab	10/06/06	4.5	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.749 J	ND(0.491) J	ND(0.491) J	2.68 J	0.863 J
	SINS6	near slab	10/06/06	8.5	22.7 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	2.86 J	ND(0.491) J	ND(0.491) J	2.57 J	1.04 J
SI 07	SI7-IA	indoor air	3/21/09	0	8.5	ND(0.75)	ND(0.15)	ND(0.75)	1	2.5 J	ND(0.75)	ND(0.75)	14	2	ND(0.75)	6.3	2.1
	SI7-IA	indoor air	1/23/10	0	1.1	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	2.4	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)
	SI7-GA	garage air	3/21/09	0	22	ND(1)	ND(0.21)	ND(1)	1.7	ND(1)	ND(1)	ND(1)	35	4.9	1.6	16	5.3
	SI7-GA	garage air	1/23/10	0	1.4	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	2.7	ND(0.81)	ND(0.81)	1.3	ND(0.81)
	SI7-SS1	sub slab	3/22/09	0	1.5	ND(0.71)	ND(0.14)	0.85	1	1.2	ND(0.71)	ND(0.71)	3.1	0.76	ND(0.71)	2	0.81
	SI7-SS1	sub slab	1/24/10	0	1.4	ND(0.84)	ND(0.17)	ND(0.84)	1.3	3.4	ND(0.84)	0.9	2.5	0.85	ND(0.84)	1.5	ND(0.84)
	SI7-SS2	sub slab	3/22/09	0	1.9	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	2.5	ND(0.67)	ND(0.67)	0.97	ND(0.67)
	SI7-SS2	sub slab	1/24/10	0	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	26	ND(0.75)	ND(0.75)	0.98	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)
	SINS7	near slab	5/12/06	4.3	144	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	8.89	ND(0.982)	ND(0.982)	2.97	ND(0.868)
	SINS7	near slab	5/12/06	9.3	184	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	54.2	1.34	1.48	7.49	2.04
	SINS7	near slab	10/05/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.432 J	ND(0.491) J	ND(0.491) J	1.37 J	0.441 J
	SINS7	near slab	10/05/06	9.3	0.729 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	3.37 J	ND(0.491) J	ND(0.491) J	1.65 J	0.655 J
SI 08	SI8-IA	indoor air	3/17/09	0	0.85	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	39 J	ND(0.82)	ND(0.82)	2.3	ND(0.82)	ND(0.82)	1.9	ND(0.82)
	SI8-IA	indoor air	1/25/10	0	0.75	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75) J	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)
	SI8-CS	crawlspace	3/17/09	0	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.8)	31 J	ND(0.8)	ND(0.8)	2	ND(0.8)	ND(0.8)	1.4	ND(0.8)
	SI8-CS	crawlspace	1/25/10	0	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97) J	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)
	SI8-SS1	sub slab	3/17/09	0	1.4	ND(0.71)	ND(0.14)	1.4	1.5	1.7	ND(0.71)	ND(0.71)	4.2	1	ND(0.71)	3.1	0.96
	SI8-SS1	sub slab	1/26/10	0	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.74)	230 J	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)
	SINS8	near slab	5/12/06	5.3	51.7	2.37	ND(1.8)	--	--	--	2.35	ND(0.426)	10	0.601	1.48	5.8	1.96
	SINS8	near slab	5/12/06	9.3	75.2	3.8	ND(1.8)	--	--	--	3.83	ND(0.426)	14.2	1.14	2.09	7	2.88
	SINS8	near slab	5/12/06	13.3	468 J	4.34 J	ND(3.6) J	--	--	--	4.02 J	ND(0.851) J	31.3 J	1.36 J	2.26 J	10.6 J	3.8 J
	SINS8	near slab	9/21/06	5.3	1.06 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.671 J	ND(0.491) J	ND(0.491) J	1.27 J	0.481 J
	SINS8	near slab	9/21/06	9.3	0.881 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	2.72 J	ND(0.491) J	ND(0.491) J	2.21 J	0.93 J

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Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 09	SI9-IA	indoor air	3/21/09	0	2.9	ND(0.9)	ND(0.18)	8.4	1.3	4.1 J	ND(0.9)	ND(0.9)	8.6	1.8	0.91	3.7	1.1
	SI9-IA	indoor air	2/01/10	0	1.8	ND(0.82)	ND(0.16)	1.6	ND(0.82)	28 J	ND(0.82)	ND(0.82)	7.5	ND(0.82)	ND(0.82)	0.92	ND(0.82)
	SI9-CS	crawlspace	3/21/09	0	4.4	ND(0.7)	ND(0.14)	3.5	0.96	3.1 J	ND(0.7)	ND(0.7)	7.3	1.1	ND(0.7)	2.1	0.75
	SI9-CS	crawlspace	2/01/10	0	1.7	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.88)	16 J	ND(0.88)	ND(0.88)	3.2	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)
	SI9-DP	deep probe	3/21/09	0	2.9	ND(0.77)	ND(0.15)	0.83	3.1	110	ND(0.77)	1.4	6.7	ND(0.77)	ND(0.77)	2	1.3
	SI9-SS1	sub slab	3/21/09	0	1.6	ND(0.66)	ND(0.13)	0.67	0.85	14	ND(0.66)	ND(0.66)	3.3	1	ND(0.66)	2.9	0.82
	SI9-SS1	sub slab	1/30/10	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	27 J	ND(0.82)	ND(0.82)	1.9	ND(0.82)	ND(0.82)	1.2	ND(0.82)
	SINS9	near slab	5/16/06	6	2.05	2.63	ND(1.8)	--	--	--	2.93	0.471	11.9	ND(0.491)	1.11	3.82	1.24
	SINS9	near slab	5/16/06	11	17.1	2.3	ND(1.8)	--	--	--	2.46	ND(0.426)	6.74	ND(0.491)	1.16	3.8	1.24
	SINS9 Dup	near slab	5/16/06	6	2.18	2.38	ND(1.8)	--	--	--	2.86	ND(0.426)	11.9	ND(0.491)	1.18	4.82	1.4
	SINS9	near slab	9/19/06	6	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.81 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS9	near slab	9/19/06	11	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.8 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
SI 10	SIIA10	indoor air	7/24/08	0	ND(0.86)	ND(0.86)	ND(0.86)	--	--	--	ND(0.86)	ND(0.86)	3.3	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SIA10 Dup	indoor air	7/24/08	0	ND(0.78)	ND(0.78)	ND(0.78)	--	--	--	ND(0.78)	ND(0.78)	3	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	SI10-IA	indoor air	3/17/09	0	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	1.1	ND(0.78)	ND(0.78)	1.8	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	SI10-IA	indoor air	12/08/09	0	3.3	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	0.86	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SI10-CS	crawlspace	3/17/09	0	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	3.7	ND(0.87)	ND(0.87)	1.6	ND(0.87)
	SI10-CS	crawlspace	2/01/10	0	1.7	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73) J	ND(0.73)	ND(0.73)	1.5	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)
	SISS10-1	sub slab	7/23/08	0	ND(2.5)	ND(2.5)	ND(2.5)	--	--	--	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
	SISS10-2	sub slab	7/23/08	0	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	3.7	ND(2.7)	ND(2.7)	6.8	ND(2.7)
	SI10-SS1	sub slab	3/17/09	0	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	6.8	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)
	SI10-SS1	sub slab	12/07/09	0	ND(11)	ND(11)	ND(2.1)	ND(11)	ND(11)	2400	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)
	SI10-SS1	sub slab	3/30/10	0	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SI10-SS1	sub slab	4/23/10	0	ND(1)	ND(1)	ND(0.2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	SI10-SS2	sub slab	3/17/09	0	ND(0.94)	ND(0.94)	ND(0.19)	ND(0.94)	ND(0.94)	4.1	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.94)
	SI10-SS2	sub slab	12/09/09	0	ND(11)	ND(11)	ND(2.3)	ND(11)	ND(11)	7000	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)
	SI10-SS2	sub slab	3/30/10	0	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)
	SI10-SS2	sub slab	4/23/10	0	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	2.9	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)
	SINS10	near slab	5/15/06	4.3	3.25	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	8.69	ND(0.491)	ND(0.491)	1.48	0.555
	SINS10	near slab	5/15/06	8.3	16.6	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	103	ND(0.982)	ND(0.982)	5.5	1.84
	SINS10	near slab	5/15/06	13.3	430	1.55	ND(3.6)	--	--	--	1.48	ND(0.851)	57.3	1.07	ND(0.982)	8.51	2.57
	SINS10	near slab	9/19/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.73 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS10	near slab	9/19/06	8.3	1.71 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.16 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS10	near slab	9/19/06	13.3	75.4 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	7.79 J	ND(0.491) J	ND(0.491) J	1.42 J	0.826 J
	SIOAH10	outdoor air	7/24/08	0	ND(0.91)	ND(0.91)	ND(0.91)	--	--	--	ND(0.91)	ND(0.91)	1.2	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)
	SI10-CS1	crawlspace	1/30/10	0	1.3	1	ND(0.16)	ND(0.79)	ND(0.79)	370 J	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI10-NS	near slab	12/09/09	4.3	ND(4.8)	ND(4.8)	ND(0.96)	ND(4.8)	ND(4.8)	640	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)
	SI10-NS	near slab	12/09/09	8.3	ND(38)	ND(38)	ND(7.7)	ND(38)	ND(38)	19000	ND(38)	ND(38)	ND(38)	ND(38)	ND(38)	ND(38)	ND(38)
	SI10-NS	near slab	1/26/10	8.3	ND(2.4)	ND(2.4)	ND(0.47)	ND(2.4)	ND(2.4)	220 J	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)
	SI10-NS	near slab	1/26/10	13.3	ND(3)	ND(3)	ND(0.6)	ND(3)	ND(3)	69 J	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)
	SI10-NS	near slab	1/27/10	4.3	ND(2.8)	ND(2.8)	ND(0.55)	ND(2.8)	ND(2.8)	4.2 J	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)
	SI10-NS	near slab	3/29/10	4.3	ND(2.7)	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)
	SI10-NS	near slab	3/29/10	8.3	ND(2.7)	ND(2.7)	0.79	ND(2.7)	ND(2.7)	14	ND(2.7)	ND(2.7)	12	ND(2.7)	ND(2.7)	9.7	2.8
	SI10-NS	near slab	3/29/10	13.3	ND(2.9)	ND(2.9)	ND(0.58)	ND(2.9)	ND(2.9)	5.2	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	3	ND(2.9)
	SI10-NS	near slab	4/23/10	4.3	ND(2.3)	ND(2.3)	ND(0.46)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)
	SI10-NS	near slab	4/23/10	8.3	ND(3)	ND(3)	ND(0.6)	ND(3)	ND(3)	16	ND(3)	ND(3)	5.4	ND(3)	ND(3)	5.3	ND(3)
	SI10-NS	near slab	4/23/10	13.3	ND(2.1)	ND(2.1)	ND(0.42)	ND(2.1)	ND(2.1)	3.4 J	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)
	SI10-OA	outdoor air	12/08/09	0	3.1	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	0.89	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)
	SI10-SS3	sub slab	1/26/10	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	11	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI10-SS3	sub slab	4/23/10	0	ND(1)	ND(1)	ND(0.21)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	SI10-SS4	sub slab	1/26/10	0	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.74)	1.7	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 11	SIIA11	indoor air	5/07/08	0	2	ND(0.82)	ND(0.82)	--	--	--	1.2	1.6	5.4	6	2.1	5	1.7
	SIG11	garage air	5/07/08	0	6.6	ND(0.86)	ND(0.86)	--	--	--	1.1 J	ND(0.86)	11	6.6	2.4 J	9.6	4
	SIG11 Dup	garage air	5/07/08	0	6.6	ND(0.97)	ND(0.97)	--	--	--	1.1 J	ND(0.97)	11	6.3	2.4 J	8.9	3.8
	SISS11-1	sub slab	5/06/08	0	7.6	ND(2.5)	ND(2.5)	--	--	--	ND(2.5)	ND(2.5)	11	14	6.3	22	6.9
	SISS11-2	sub slab	5/06/08	0	ND(2.5)	ND(2.5)	ND(2.5)	--	--	--	ND(2.5)	ND(2.5)	15	4.6	ND(2.5)	12	3.2
	SINS11	near slab	5/12/06	4.3	88.1	ND(12.3) J	ND(45) J	--	--	--	ND(12.3) J	ND(10.6) J	24.8	ND(12.3) J	ND(12.3) J	ND(21.7) J	ND(10.8) J
	SINS11	near slab	5/12/06	7.5	70.1	ND(12.3) J	ND(45) J	--	--	--	ND(12.3) J	ND(10.6) J	18.8	ND(12.3) J	ND(12.3) J	ND(21.7) J	ND(10.8) J
	SINS11	near slab	9/19/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.778 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS11	near slab	9/19/06	7.5	ND(2.35) J	ND(1.64) J	ND(6) J	--	--	--	ND(1.64) J	ND(1.42) J	9.17 J	ND(1.64) J	ND(1.64) J	5.08 J	1.96 J
	SINS11 Dup	near slab	9/19/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.931 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS11	near slab	5/06/08	4.3	ND(2.9)	ND(2.9)	ND(2.9)	--	--	--	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)
	SINS11	near slab	5/06/08	7.5	ND(2.6)	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SIOAH11	outdoor air	5/07/08	0	ND(0.79)	ND(0.79)	ND(0.79)	--	--	--	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
SI 12	SI12-IA	indoor air	3/14/09	0	1.5	ND(1.1)	ND(0.21)	ND(1.1)	ND(1.1)	8	ND(1.1)	ND(1.1)	5.6	ND(1.1)	ND(1.1)	1.9	ND(1.1)
	SI12-IA	indoor air	1/27/10	0	2.5	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79) J	ND(0.79)	ND(0.79)	2.4	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI12-CS	crawlspace	3/14/09	0	1.2	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	5.6	ND(0.79)	ND(0.79)	1.4	ND(0.79)
	SI12-CS	crawlspace	1/27/10	0	2.2	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74) J	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)
	SINS12	near slab	5/16/06	5	3.31	4.5	ND(3.6)	--	--	--	4.79	ND(0.851)	13.3	ND(0.982)	1.95	7.08	2.75
	SINS12 Dup	near slab	5/16/06	5	3.25	4.38	ND(3.6)	--	--	--	4.8	ND(0.851)	16.3	ND(0.982)	2.06	7.02	2.54
	SINS12	near slab	9/19/06	5	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.47	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	SINS12 Dup	near slab	9/19/06	5	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.56	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
SI 13	SI13-IA	indoor air	3/18/09	0	55	ND(2.2)	ND(0.45)	3.4	5.8	12	5.9	2.5	70	33	12	74	26
	SI13-IA	indoor air	1/24/10	0	19	ND(0.92)	ND(0.18)	1.4	4	ND(0.92)	1.6	1.7	24	11	3.2	18	6.7
	SI13-GA	garage air	3/18/09	0	24	1.7	ND(0.19)	3	3.8	2.1 J	11	1.2	120	64	20	130	45
	SI13-GA	garage air	1/24/10	0	37	1.6	ND(0.17)	5.8	8.4	8.5	11	2	94	78	24	120	46
	SI13-SS1	sub slab	3/18/09	0	3.1	ND(0.75)	ND(0.15)	2.1	2.2	2.8	ND(0.75)	ND(0.75)	7.8	2.6	0.91	5	1.9
	SI13-SS1	sub slab	1/25/10	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	SI13-SS2	sub slab	3/18/09	0	2.5	ND(0.71)	ND(0.14)	1.3	1.2	2.4	ND(0.71)	ND(0.71)	6.4	1.1	ND(0.71)	2.5	1.1
	SI13-SS2	sub slab	1/25/10	0	0.93	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.8)	4.5 J	ND(0.8)	ND(0.8)	1.7	ND(0.8)	ND(0.8)	0.95	ND(0.8)
	SI13-SS2 Dup	sub slab	1/25/10	0	1	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81) J	ND(0.81)	1.1	1.8	ND(0.81)	ND(0.81)	1	ND(0.81)
	SINS13	near slab	5/15/06	5.3	83.4	2.18	ND(1.8)	--	--	--	2	ND(0.426)	20.9	0.583	1.14	8.93	3.12
	SINS13	near slab	5/15/06	10.3	58.6	5.7	ND(1.8)	--	--	--	5.1	ND(0.426)	26.9	0.635	ND(0.491)	9.25	3.42
	SINS13	near slab	9/19/06	5.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.723 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
SI 14	SIIA14-1	indoor air	5/07/08	0	1.4	ND(0.85)	ND(0.85)	--	--	--	ND(0.85)	ND(0.85)	0.91	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SIIA14-2	indoor air	5/07/08	0	1.3	ND(0.84)	ND(0.84)	--	--	--	ND(0.84)	ND(0.84)	1.1	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)
	SI14-IA	indoor air	3/16/09	0	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)
	SISS14-1	sub slab	5/06/08	0	ND(2.6)	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SISS14-2	sub slab	5/06/08	0	2.8	ND(2.4)	ND(2.4)	--	--	--	ND(2.4)	ND(2.4)	17	7.1	3.7	31	5.4
	SI14-SS1	sub slab	3/16/09	0	ND(0.67)	ND(0.67)	ND(0.13)	1.2	ND(0.67)	0.88 J	ND(0.67)	ND(0.67)	2.8	1.7	ND(0.67)	2.5	0.72
	SI14-SS2	sub slab	3/16/09	0	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	2.3 J	ND(0.75)	ND(0.75)	1.3	ND(0.75)	ND(0.75)	0.94	ND(0.75)
	SINS14	near slab	5/15/06	4.3	93.4	1.54	ND(1.8)	--	--	--	1.53	ND(0.426)	15.1	ND(0.491)	0.946	8.38	2.5
	SINS14	near slab	5/15/06	9.3	118	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	10.7	ND(0.491)	0.516	2.73	1.03
	SINS14	near slab	10/05/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.659 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS14	near slab	10/05/06	9.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.416 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS14	near slab	5/06/08	4.3	ND(2.6)	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SINS14	near slab	5/06/08	9.3	ND(3.2)	ND(3.2)	ND(3.2)	--	--	--	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)	ND(3.2)
	SIOAH14	outdoor air	5/07/08	0	ND(0.93)	ND(0.93)	ND(0.93)	--	--	--	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)
SI 15	SINS15	near slab	5/16/06	6.3	92.1	4.07	ND(3.6)	--	--	--	4.78	ND(0.851)	164 J	ND(0.982)	2.57	5.97	2.08
	SINS15 Dup	near slab	5/16/06	6.3	90.2	4.36	ND(3.6)	--	--	--	5.1	ND(0.851)	14.1 J	ND(0.982)	2.6	5.99	2.03
	SINS15	near slab	9/20/06	6.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.585 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
SI 16	SINS16	near slab	5/10/06	4.3	10.8	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	12.1	ND(0.982)	ND(0.982)	1.75	ND(0.868)
	SINS16	near slab	9/20/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.759 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS16 Dup	near slab	9/20/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.655 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
SI 17	SINS17	near slab	5/10/06	4.3	16.2	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	31.2	ND(0.982)	ND(0.982)	2.97	1.36
	SINS17	near slab	9/20/06	4.3	2.36 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	4.57 J	ND(0.491) J	ND(0.491) J	0.961 J	ND(0.434) J

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PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 18	SINS18	near slab	5/10/06	4.3	12.4	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	9.91	ND(0.982)	ND(0.982)	1.85	ND(0.868)
SI 19	SINS19	near slab	5/16/06	5.3	2.2	4.56	ND(3.6)	--	--	--	4.93	ND(0.851)	21.7	ND(0.982)	1.8	8.2	4.07
	SINS19	near slab	5/16/06	10.3	33.6	3.5	ND(3.6)	--	--	--	8.29	11.7	40	ND(0.982)	4.64	14.7	2
	SINS19	near slab	9/18/06	5.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.88 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
SI 20	SINS20	near slab	5/16/06	4.3	15.4	2.92	ND(3.6)	--	--	--	3.02	ND(0.851)	11.2	ND(0.982)	1.24	4.42	1.37
	SINS20	near slab	5/16/06	9.3	22.2	6.31	ND(1.8)	--	--	--	11.3	ND(0.426)	9.14	5.42	12.7	25.7	9.19
	SINS20	near slab	5/16/06	14.3	105	3.22	ND(3.6)	--	--	--	8.46	ND(0.851) J	18.2	ND(0.982)	ND(0.982) J	13.1	ND(0.868)
	SINS20	near slab	5/16/06	19.6	36.3	2.86	ND(3.6)	--	--	--	8.28	11.7	53.5	ND(0.982)	4.63	15.9	0.905
	SINS20 Dup	near slab	5/16/06	9.3	379	2.73	ND(3.6)	--	--	--	7.73	11.6 J	13.7	ND(0.982)	4.26 J	16	1
	SINS20	near slab	9/18/06	4.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.811 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS20	near slab	9/18/06	9.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.41 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS20	near slab	9/18/06	19.6	18 J	ND(1.23) J	ND(4.5) J	--	--	--	ND(1.23) J	ND(1.06) J	7.3 J	ND(1.23) J	ND(1.23) J	ND(2.17) J	1.16 J
SI 21	SINS21	near slab	5/16/06	4.8	25.8	3.26	ND(3.6)	--	--	--	3.59	ND(0.851)	10.8	ND(0.982)	2.14	8.53	2.61
	SINS21	near slab	5/16/06	9.3	33.8	4.3	ND(3.6)	--	--	--	4.86	ND(0.851)	15.9	ND(0.982)	2.21	6.26	2
	SINS21	near slab	9/18/06	4.8	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.688 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS21	near slab	9/18/06	9.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.12 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
SI 22	SINS22	near slab	5/15/06	5.3	71	ND(0.491)	ND(1.8)	--	--	--	1.05	ND(0.426)	25.5	2.91	1.93	12.8	4.44
	SINS22	near slab	5/15/06	10.3	4.39	2.82	ND(1.8)	--	--	--	2.5	ND(0.426)	7.42	ND(0.491)	1.06	3.51	1.36
	SINS22	near slab	5/15/06	15.3	49.3	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	17.8	0.744	ND(0.491)	3.86	1.46
	SINS22	near slab	9/19/06	10.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.559 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS22	near slab	9/19/06	15.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	1.25	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
SI 23	SI23-IA	indoor air	3/17/09	0	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.74)	1.4 J	ND(0.74)	1.7	16	ND(0.74)	ND(0.74)	1.2	ND(0.74)
	SI23-IA	indoor air	1/27/10	0	2.5	ND(0.99)	ND(0.2)	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.99)	3.7	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.99)
	SI23-GA	garage air	3/17/09	0	19	ND(0.64)	ND(0.13)	0.81	1.1	ND(0.64)	1.7	ND(0.64)	43	8.9	2.7	27	8.2
	SI23-GA	garage air	1/27/10	0	16	ND(0.79)	ND(0.16)	ND(0.79)	0.98	ND(0.79)	1.1	ND(0.79)	22	5.5	1.5	17	5
	SI23-CS	crawlspace	3/17/09	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI23-CS	crawlspace	1/27/10	0	1.3	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SI23-DP	deep probe	3/17/09	0	48	1.2	ND(0.2)	30	130	920 J	1.1	8.5	24	3	1.3	8.8	2.7
	SI23-DP	deep probe	1/28/10	0	ND(0.67)	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.67)	8.6 J	ND(0.67)	ND(0.67)	0.93	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
	SI23-SS1	sub slab	3/17/09	0	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	1.4 J	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)
	SI23-SS1 Dup	sub slab	3/17/09	0	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	2.1 J	ND(0.72)	ND(0.72)	1.2	ND(0.72)
	SINS23	near slab	5/16/06	5.3	935	ND(2.46)	ND(9)	--	--	--	ND(2.46)	ND(2.13)	26.1	ND(2.46)	10.5	26	ND(2.17)
	SINS23	near slab	5/16/06	10.3	37.8	1.96	ND(1.8)	--	--	--	2.19	ND(0.426)	11.1	ND(0.491)	1.06	3.34	0.98
	SINS23	near slab	5/16/06	15.3	152	5.66	ND(1.8)	--	--	--	6.72	ND(0.426)	21	1.22	3.35	10.3	3.24
	SINS23	near slab	9/18/06	5.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.593 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	ND(0.434) J
	SINS23	near slab	9/18/06	10.3	122 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	10.4 J	0.561 J	ND(0.491) J	3.35 J	1.31 J
	SINS23	near slab	9/18/06	15.3	0.957 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	5.07 J	ND(0.491) J	ND(0.491) J	1.32 J	0.448 J
SI 24	SI24-IA	indoor air	3/21/09	0	0.87	ND(0.77)	ND(0.15)	3	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	2.4	1.4	0.8	ND(0.77)	ND(0.77)
	SI24-IA	indoor air	1/29/10	0	1.8	ND(0.56)	ND(0.11)	0.92	ND(0.56)	2.4 J	ND(0.56)	ND(0.56)	3.7	ND(0.56)	ND(0.56)	12	1.5
	SI24-IA Dup	indoor air	1/29/10	0	2.1	ND(0.84)	ND(0.17)	1.1	ND(0.84)	7.8 J	ND(0.84)	ND(0.84)	4.1	ND(0.84)	ND(0.84)	14	1.7
	SI24-SS1	sub slab	3/22/09	0	1.7	11	ND(0.13)	1	1.1	1.1	ND(0.64)	ND(0.64)	3.5 J	1	ND(0.64)	2.2	0.8
	SI24-SS1 Dup	sub slab	3/22/09	0	1.8	11	ND(0.13)	1	1.4	1.1	ND(0.65)	ND(0.65)	5.7 J	1.1	ND(0.65)	2.4	0.89
	SI24-SS1	sub slab	1/30/10	0	1.5	ND(0.68)	ND(0.14)	1.5	1.5	21 J	ND(0.68)	ND(0.68)	3.5	1.1	ND(0.68)	3.1	1
	SI24-SS2	sub slab	3/22/09	0	1.3	ND(0.66)	ND(0.13)	0.81	0.77	0.88	ND(0.66)	ND(0.66)	3.3	1.3	ND(0.66)	2.5	0.83
	SI24-SS2	sub slab	1/30/10	0	3	ND(0.78)	ND(0.16)	1.4	1.9	5.5 J	ND(0.78)	ND(0.78)	4.5	1.2	ND(0.78)	3.7	0.94
	SINS24	near slab	10/07/06	4.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.608	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	SINS24	near slab	10/07/06	9.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	0.808	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	SINS24	near slab	10/07/06	14.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	1.69	0.775 J	ND(0.491)	2.12	0.827

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 25	SI25-IA	indoor air	3/14/09	0	1.7	ND(0.82)	ND(0.16)	1.1	ND(0.82)	1.9 J	ND(0.82)	ND(0.82)	11	2.2	ND(0.82)	4	1.4
	SI25-IA	indoor air	1/24/10	0	1.7	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	6	2.9	0.82	3.4	1.3
	SI25-IA Dup	indoor air	1/24/10	0	1.8	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	5.9	2.6	ND(0.85)	3.5	1.3
	SI25-GA	garage air	3/14/09	0	4.6	ND(0.89)	ND(0.18)	3.3	0.89	1.3 J	1.4	ND(0.89)	14	9.3	2.5	15	5.1
	SI25-GA	garage air	1/24/10	0	6.4	ND(0.79)	ND(0.16)	2.7	1	ND(0.79)	1.6	ND(0.79)	11	11	3.1	15	5.3
	SI25-CS	crawlspace	3/14/09	0	0.95	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	0.94	ND(0.72)	ND(0.72)	0.83	ND(0.72)
	SI25-CS	crawlspace	1/24/10	0	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	0.95	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	SI25-SS1	sub slab	3/14/09	0	ND(28)	ND(28)	ND(5.6)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)
	SI25-SS1 Dup	sub slab	3/14/09	0	ND(28)	ND(28)	ND(5.6)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)
	SI25-SS1	sub slab	1/26/10	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	1.6 J	ND(0.77)	ND(0.77)	ND(0.77)	0.83	ND(0.77)	0.81	ND(0.77)
	SI25-SS1 Dup	sub slab	1/26/10	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77) J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SINS25	near slab	10/07/06	5.9	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	3.88	ND(0.376)	ND(0.491) J	ND(0.491)	0.959	ND(0.434)
	SINS25	near slab	5/06/08	5.9	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)
SI 26	SI26-IA	indoor air	3/14/09	0	1	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	2.3 J	ND(0.78)	ND(0.78)	0.94	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	SI26-CS	crawlspace	3/14/09	0	1.1	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.91)	1 J	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)
	SINS26	near slab	10/07/06	5	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	ND(0.376)	ND(0.491) J	ND(0.491)	ND(0.868)	ND(0.434)
	SINS26	near slab	5/07/08	5	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)	ND(2.7)
	SINS26 Dup	near slab	5/07/08	5	ND(2.6)	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
SI 27	SIIA27	indoor air	1/25/07	0	3.35	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	5.36	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SIIA27	indoor air	5/07/08	0	ND(1.1)	ND(1.1)	ND(1.1)	--	--	--	ND(1.1)	ND(1.1)	5.5	ND(1.1)	ND(1.1)	2.2	ND(1.1)
	SI27-IA	indoor air	3/15/09	0	1.3	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SI27-CS	crawlspace	3/15/09	0	0.86	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SICS27	crawlspace	1/25/07	0	ND(0.704)	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	1.09	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SICS27	crawlspace	5/07/08	0	ND(0.85)	ND(0.85)	ND(0.85)	--	--	--	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SIOAH27	outdoor air	1/25/07	0	2.11	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	0.806	ND(2.46)	ND(2.46)	ND(1.74)	ND(0.868)
	SIOAH27	outdoor air	5/07/08	0	ND(0.85)	ND(0.85)	ND(0.85)	--	--	--	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
SI 28	SIIA28U1	indoor air	8/15/08	0	1.8	ND(1.1)	ND(1.1)	--	--	--	ND(1.1)	ND(1.1)	12	ND(1.1)	ND(1.1)	1.5	ND(1.1)
	SIIA28U2	indoor air	8/15/08	0	2	ND(0.97)	ND(0.97)	--	--	--	ND(0.97)	ND(0.97)	15	ND(0.97)	ND(0.97)	1.7	ND(0.97)
	SIIA28U2 Dup	indoor air	8/15/08	0	1.8	ND(0.72)	ND(0.72)	--	--	--	ND(0.72)	ND(0.72)	16	ND(0.72)	ND(0.72)	1.7	ND(0.72)
	SI28-FFA	indoor air	3/20/09	0	1.1	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	23	ND(0.79)	0.94	7.5	0.84	ND(0.79)	0.92	ND(0.79)
	SIIA28	indoor air	5/08/08	0	0.89	ND(0.89)	ND(0.89)	--	--	--	ND(0.89)	ND(0.89)	10	1.2	ND(0.89)	1.6	ND(0.89)
	SIIA28B1	indoor air	8/15/08	0	1.5	ND(0.86)	ND(0.86)	--	--	--	ND(0.86)	ND(0.86)	9.4	ND(0.86)	ND(0.86)	1.4	ND(0.86)
	SIIA28B2	indoor air	8/15/08	0	1.3	ND(0.9)	ND(0.9)	--	--	--	ND(0.9)	ND(0.9)	9.1	ND(0.9)	ND(0.9)	1.2	ND(0.9)
	SI28-IA	indoor air	3/20/09	0	1.3	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	3.9	ND(0.78)	ND(0.78)	6	0.81	ND(0.78)	ND(0.78)	ND(0.78)
	SI28-IA	indoor air	1/27/10	0	3.1	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	9.2 J	ND(0.77)	ND(0.77)	6	ND(0.77)	ND(0.77)	0.92	ND(0.77)
	SIG28	garage air	5/08/08	0	4.1	ND(0.91)	ND(0.91)	--	--	--	ND(0.91)	ND(0.91)	15	3.6	1.2	13	4.2
	SIG28	garage air	8/15/08	0	23	ND(0.77)	ND(0.77)	--	--	--	1.5	ND(0.77)	39	8.9	2.7	24	7.6
	SI28-GA	garage air	3/20/09	0	1.2	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)
	SI28-GA	garage air	1/27/10	0	6.1	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.76) J	ND(0.76)	ND(0.76)	6.5	0.81	ND(0.76)	3.4	0.97
	SISS28-1	sub slab	5/07/08	0	ND(2.5)	ND(2.5)	ND(2.5)	--	--	--	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
	SISS28-2	sub slab	5/07/08	0	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	5	ND(2.7)	ND(2.7)	5	ND(2.7)
	SISS28-3	sub slab	8/14/08	0	ND(2.7)	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	3.2	ND(2.7)	ND(2.7)	3.6	ND(2.7)
	SISS28-4	sub slab	8/14/08	0	ND(2.8)	ND(2.8)	ND(2.8)	--	--	--	ND(2.8)	ND(2.8)	4	3.5	ND(2.8)	3.9	ND(2.8)
	SI28-SS1	sub slab	3/20/09	0	0.95	1.6	ND(0.15)	ND(0.73)	1.3	1.3 J	ND(0.73)	ND(0.73)	3.3	ND(0.73)	ND(0.73)	0.99	ND(0.73)
	SI28-SS1	sub slab	1/28/10	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	3.2 J	ND(0.79)	ND(0.79)	1.1	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI28-SS1 Dup	sub slab	1/28/10	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	4.5 J	ND(0.79)	ND(0.79)	0.92	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI28-SS2	sub slab	3/20/09	0	ND(0.69)	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.69)	1.7 J	ND(0.69)	0.78	3.2	0.85	ND(0.69)	1.3	ND(0.69)
	SI28-SS2	sub slab	1/28/10	0	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.76)	2.2 J	ND(0.76)	ND(0.76)	1.5	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)
	SINS28	near slab	5/08/08	5	220	ND(3.2)	ND(3.2)	--	--	--	ND(3.2)	ND(3.2)	5.6	ND(3.2)	ND(3.2)	7	4

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 28 cont.	SINS28	near slab	5/08/08	10	88	ND(3.1)	ND(3.1)	--	--	--	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	3.1	ND(3.1)
	SINS28	near slab	5/08/08	15	160	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	3.8	ND(2.6)	ND(2.6)	4.7	ND(2.6)
	SINS28	near slab	5/08/08	20	150	ND(3.1)	ND(3.1)	--	--	--	ND(3.1)	ND(3.1)	3.8	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)
	SINS28	near slab	5/08/08	25	250	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	9.4	ND(2.7)	ND(2.7)	5.3	ND(2.7)
	SI28-NS	near slab	3/20/09	15	4.4	ND(0.73)	ND(0.15)	ND(0.73)	1.3	45	ND(0.73)	ND(0.73)	2.4	ND(0.73)	ND(0.73)	1.2	ND(0.73)
	SI28-NS	near slab	3/20/09	25	270	ND(0.77)	ND(0.15)	4	22	110 J	ND(0.77)	ND(0.77)	19	1.1	ND(0.77)	9.3	4.3
	SI28-NS	near slab	3/21/09	5	19	ND(0.74)	ND(0.15)	1.3	2.4	170	ND(0.74)	ND(0.74)	3.1	ND(0.74)	ND(0.74)	1.8	0.91
	SI28-NS	near slab	3/21/09	10	42	ND(0.92)	ND(0.18)	1.6	4.2	47	ND(0.92)	ND(0.92)	4.2	ND(0.92)	ND(0.92)	2.7	1.2
	SI28-NS	near slab	3/21/09	20	200	ND(1.4)	ND(0.29)	4.2	18	240	ND(1.4)	ND(1.4)	11	2.1	ND(1.4)	11	5.4
	SIOAH28	outdoor air	5/08/08	0	ND(0.83)	ND(0.83)	ND(0.83)	--	--	--	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)
	SIOAH28	outdoor air	8/15/08	0	1.4	ND(0.9)	ND(0.9)	--	--	--	ND(0.9)	ND(0.9)	1.2	ND(0.9)	ND(0.9)	0.96	ND(0.9)
	SI28-FF	indoor air	1/27/10	0	2.9	ND(1.1)	ND(0.21)	ND(1.1)	ND(1.1)	9.7 J	ND(1.1)	ND(1.1)	5.8	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)
SI 29	SI29-IA	indoor air	3/15/09	0	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	1.4	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)
	SI29-IA	indoor air	1/25/10	0	0.92	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.9	1.8	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SI29-CS	crawlspace	3/15/09	0	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)
	SI29-CS	crawlspace	1/25/10	0	ND(0.92)	ND(0.92)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	0.94	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)
SI 30	SI30-IA	indoor air	3/16/09	0	3.1	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.84)	1.2	ND(0.84)	ND(0.84)	1.2	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)
	SI30-IA Dup	indoor air	3/16/09	0	3.1	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.9)	1.2	ND(0.9)	ND(0.9)	1.1	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)
	SI30-IA	indoor air	1/23/10	0	3.8	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	2.2	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)
	SI30-SS1	sub slab	3/16/09	0	1.4	1.9	ND(0.14)	0.99	1.1	1.8 J	ND(0.69)	ND(0.69)	4.2	0.86	ND(0.69)	2.3	ND(0.69)
	SI30-SS2	sub slab	3/16/09	0	ND(0.68)	ND(0.68)	ND(0.14)	0.95	ND(0.68)	0.91 J	ND(0.68)	ND(0.68)	2	1.5	ND(0.68)	0.72	ND(0.68)
	SI30-SS2 Dup	sub slab	3/16/09	0	ND(0.69)	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.69)	1.3 J	ND(0.69)	ND(0.69)	2.1	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)
SI 31	SI31-IA	indoor air	3/14/09	0	15	ND(0.97)	ND(0.19)	1.4	1.1	29	ND(0.97)	ND(0.97)	6	ND(0.97)	ND(0.97)	1.3	ND(0.97)
	SI31-IA	indoor air	1/28/10	0	12	ND(0.95)	ND(0.19)	1.3	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	10	ND(0.95)	ND(0.95)	1	ND(0.95)
	SI31-CS	crawlspace	3/14/09	0	13	ND(0.85)	ND(0.17)	1.7	1.1	40	ND(0.85)	1.1	7	ND(0.85)	ND(0.85)	1.2	ND(0.85)
	SI31-CS	crawlspace	1/28/10	0	8.7	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	5	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)
	SI31-SS1	sub slab	3/14/09	0	1.2	4.7	ND(0.15)	1.8	0.96	1.3	ND(0.75)	ND(0.75)	4.1	0.97	ND(0.75)	2.5	0.82
	SI31-SS1	sub slab	1/29/10	0	1.9	ND(0.87)	ND(0.17)	1.5	1.3	2.5 J	ND(0.87)	ND(0.87)	3.8	ND(0.87)	ND(0.87)	2.6	ND(0.87)
	SI31-SS1 Dup	sub slab	1/29/10	0	1.6	ND(0.87)	ND(0.17)	1.9	1.2	2.1 J	ND(0.87)	ND(0.87)	4.1	1.4	ND(0.87)	3.2	1.1
	SI31-SS2	sub slab	3/14/09	0	1.1	1.7	ND(0.14)	ND(0.72)	1.2	ND(0.72)	ND(0.72)	ND(0.72)	3.8	ND(0.72)	ND(0.72)	2.3	0.77
	SI31-SS2	sub slab	1/29/10	0	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.78)	4.1	ND(0.78)	ND(0.78)	0.85	ND(0.78)	ND(0.78)	0.8	ND(0.78)
SI 32	SI32-IA	indoor air	3/18/09	0	ND(2.6)	ND(2.6)	ND(0.52)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)
	SI32-IA	indoor air	1/27/10	0	2.2	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)
	SI32-CS	crawlspace	3/18/09	0	ND(1.1)	ND(1.1)	ND(0.22)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)
	SI32-CS	crawlspace	1/27/10	0	1.9	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
	SI32-DP	deep probe	3/18/09	0	2.6	1.7 J	ND(0.14)	3.1	13	14	ND(0.71)	ND(0.71)	2.8	0.9	ND(0.71)	1.9 J	ND(0.71)
	SI32-DP Dup	deep probe	3/18/09	0	2.6	ND(0.71) J	ND(0.14)	2.8	13	11	ND(0.71)	ND(0.71)	3.2	0.96	ND(0.71)	2.9 J	0.87
	SI32-DP	deep probe	1/28/10	0	1.7	ND(1.5)	ND(0.3)	ND(1.5) J	ND(1.5) J	180 J	ND(1.5)	ND(1.5)	16 J	ND(1.5) J	ND(1.5)	ND(1.5) J	ND(1.5) J
	SI32-DP Dup	deep probe	1/28/10	0	1.8	1.1	ND(0.18)	6.9 J	4.4 J	53 J	ND(0.91)	ND(0.91)	26 J	2.9 J	1.3	10 J	3.3 J
SI 33	SI33-IA	indoor air	3/15/09	0	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	1.2	ND(0.87)	ND(0.87)	10	1.7	ND(0.87)	3.1	1.1
	SI33-IA	indoor air	1/23/10	0	0.94	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	17	1.9	ND(0.67)	1.8	ND(0.67)
	SI33-CS	crawlspace	3/15/09	0	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	0.96	ND(0.87)	ND(0.87)	3.6	ND(0.87)	ND(0.87)	1.3	ND(0.87)
	SI33-CS	crawlspace	1/23/10	0	0.95	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	4.3	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)
	SI33-GA	garage air	1/23/10	0	1	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	11	2.5	ND(0.87)	2	ND(0.87)
SI 34	SI34-IA	indoor air	3/14/09	0	1.7	ND(0.96)	ND(0.19)	ND(0.96)	1.2	6.7 J	ND(0.96)	ND(0.96)	6.5	ND(0.96)	ND(0.96)	2.4	ND(0.96)
	SI34-CS	crawlspace	3/14/09	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	SI34-CS Dup	crawlspace	3/14/09	0	0.78	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	0.77	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)
	SI34-DP	deep probe	3/14/09	0	7.1	ND(0.82)	ND(0.16)	19	130	24 J	ND(0.82)	ND(0.82)	5.3	1.5	0.84	6.5	ND(0.82)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 35	SI35-IA	indoor air	3/15/09	0	14	ND(0.86)	ND(0.17)	2.8	5.3	ND(0.86)	ND(0.86)	ND(0.86)	2.2	1	ND(0.86)	2.5	ND(0.86)
	SI35-IA	indoor air	1/26/10	0	0.93	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81) J	ND(0.81)	ND(0.81)	1.6	ND(0.81)	ND(0.81)	0.88	ND(0.81)
	SI35-GA	garage air	3/15/09	0	19	ND(0.8)	ND(0.16)	3.6	7	ND(0.8)	ND(0.8)	ND(0.8)	2.5	1.5	ND(0.8)	3.5	1.1
	SI35-GA	garage air	1/26/10	0	1	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75) J	ND(0.75)	ND(0.75)	0.88	ND(0.75)	ND(0.75)	0.76	ND(0.75)
	SI35-SS1	sub slab	3/15/09	0	4.6	1.1	ND(0.13)	2.3	1.6	2.6	2.9	ND(0.66)	14	3.3	1.3	6.2	2
	SI35-SS1	sub slab	1/27/10	0	17	ND(1.2)	ND(0.24)	6.3	7.8	450 J	ND(1.2)	ND(1.2)	11	7.4	3.2	14	4.9
	SI35-SS2	sub slab	3/15/09	0	0.79	ND(0.7)	ND(0.14)	0.89	0.82	0.93 J	ND(0.7)	ND(0.7)	2.5	ND(0.7)	ND(0.7)	1.7	ND(0.7)
	SI35-SS2	sub slab	1/27/10	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	0.82 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
SI 36	SI36-IA	indoor air	3/17/09	0	ND(0.93)	ND(0.93)	ND(0.19)	0.97	ND(0.93)	22	ND(0.93)	1.3	30	0.95	ND(0.93)	2.1	ND(0.93)
	SI36-IA	indoor air	1/26/10	0	1.5	ND(0.94)	ND(0.19)	ND(0.94)	ND(0.94)	ND(0.94) J	ND(0.94)	ND(0.94)	14	ND(0.94)	ND(0.94)	1.3	ND(0.94)
	SI36-CS	crawlspace	3/17/09	0	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	0.87	ND(0.72)	ND(0.72)	3.1	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)
	SI36-CS	crawlspace	1/26/10	0	ND(0.65)	ND(0.65)	ND(0.13)	ND(0.65)	ND(0.65)	ND(0.65) J	ND(0.65)	ND(0.65)	1	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.65)
SI 37	SI37-IA	indoor air	3/17/09	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	2.3	ND(0.82)	ND(0.82)	0.97	ND(0.82)
	SI37-IA	indoor air	1/26/10	0	2	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86) J	ND(0.86)	ND(0.86)	1.3	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SI37-SS1	sub slab	3/17/09	0	2	ND(0.65)	ND(0.13)	2.6	2.5	3.5 J	ND(0.65)	ND(0.65)	2.6	ND(0.65)	ND(0.65)	1.3	ND(0.65)
	SI37-SS1	sub slab	1/27/10	0	ND(1.5)	ND(1.5)	ND(0.31)	ND(1.5)	ND(1.5)	1400 J	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
	SI37-SS1 Dup	sub slab	1/27/10	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	340 J	ND(0.79)	ND(0.79)	1.3	ND(0.79)	ND(0.79)	0.84	ND(0.79)
	SI37-SS2	sub slab	3/17/09	0	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)
SI 38	SI38-IA	indoor air	3/17/09	0	1.6	ND(0.92)	ND(0.18)	1.3	1.2	60 J	ND(0.92)	5.7	39	2.5	ND(0.92)	22	4.9
	SI38-IA	indoor air	1/25/10	0	1.2	ND(0.85)	ND(0.17)	1.4	ND(0.85)	11 J	ND(0.85)	ND(0.85)	7.6	ND(0.85)	ND(0.85)	8	1.9
	SI38-CS	crawlspace	3/17/09	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI38-CS Dup	crawlspace	3/17/09	0	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SI38-CS	crawlspace	1/25/10	0	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.89)	2.3 J	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)
SI 39	SI39-IA	indoor air	3/19/09	0	0.97	ND(0.85)	ND(0.17)	1.5	ND(0.85)	2.5 J	ND(0.85)	ND(0.85)	3.1	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)
	SI39-IA Dup	indoor air	3/19/09	0	0.97	ND(0.9)	ND(0.18)	1.6	ND(0.9)	2.5 J	ND(0.9)	ND(0.9)	3.2	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)
	SI39-IA	indoor air	1/24/10	0	ND(0.83)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.83)	5.5 J	ND(0.83)	ND(0.83)	3.7	ND(0.83)	ND(0.83)	0.83	ND(0.83)
	SI39-SS1	sub slab	3/19/09	0	2.4	ND(0.75)	ND(0.15)	2.5	2.1	2.4 J	ND(0.75)	ND(0.75)	7.4	2	0.93	4.7	1.5
	SI39-SS1	sub slab	1/25/10	0	1.6	ND(0.77)	ND(0.15)	2	1.9	1.9 J	ND(0.77)	ND(0.77)	6.2	ND(0.77)	ND(0.77)	1.8	ND(0.77)
	SI39-SS2	sub slab	3/19/09	0	6.1	ND(0.75)	ND(0.15)	1.4	1.3	1.4	ND(0.75)	ND(0.75)	3.8	1.2	ND(0.75)	3	0.86
	SI39-SS2	sub slab	1/25/10	0	ND(0.83)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.83)	0.98	ND(0.83)	ND(0.83)	1.8	ND(0.83)	ND(0.83)	1.2	ND(0.83)
SI 40	SI40-IA1	indoor air	3/21/09	0	1.4	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.93)	3.8 J	ND(0.93)	ND(0.93)	1.1	ND(0.93)	ND(0.93)	1	ND(0.93)
	SI40-IA1	indoor air	2/01/10	0	1.8	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.9)	6.2	ND(0.9)	ND(0.9)	1.8	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)
	SI40-IA2	indoor air	3/21/09	0	3.2	ND(0.79)	ND(0.16)	3.1	ND(0.79)	10	ND(0.79)	1.5	6.2	1.7	ND(0.79)	6.3	2
	SI40-IA2	indoor air	2/01/10	0	2.3	ND(0.85)	ND(0.17)	2	ND(0.85)	10	ND(0.85)	ND(0.85)	29	ND(0.85)	ND(0.85)	5.6	1.6
	SI40-IA3	indoor air	3/21/09	0	2.6	ND(0.8)	ND(0.16)	3.7	ND(0.8)	14	ND(0.8)	1.4	4.4	1.7	ND(0.8)	5.4	1.7
	SI40-IA3	indoor air	2/01/10	0	1.9	ND(0.71)	ND(0.14)	3.6	ND(0.71)	1.9	ND(0.71)	1.2	3	ND(0.71)	ND(0.71)	4	1.1
	SI40-CS1	crawlspace	3/21/09	0	2.5	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	1.8	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
	SI40-CS1 Dup	crawlspace	3/21/09	0	3.1	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	1.9	ND(0.82)	ND(0.82)	1.1	ND(0.82)	ND(0.82)	0.96	ND(0.82)
	SI40-CS1	crawlspace	2/01/10	0	1.6	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.96)	5.4	ND(0.96)	ND(0.96)	1.9	ND(0.96)	ND(0.96)	1.2	ND(0.96)
	SI40-CS1 Dup	crawlspace	2/01/10	0	1.6	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.97)	5.4	ND(0.97)	ND(0.97)	2	ND(0.97)	ND(0.97)	1.2	ND(0.97)
	SI40-CS2	crawlspace	3/21/09	0	12	ND(0.85)	ND(0.17)	1	1.1	3.8	ND(0.85)	ND(0.85)	1.6	ND(0.85)	ND(0.85)	1.4	ND(0.85)
	SI40-CS2	crawlspace	2/01/10	0	8.6	ND(0.92)	ND(0.18)	1.3	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	2.1	ND(0.92)	ND(0.92)	1.6	ND(0.92)
	SI40-SS1	sub slab	3/21/09	0	17	ND(0.8)	ND(0.16)	2.7	7.3	4.1	ND(0.8)	ND(0.8)	9.9	2.5	1.2	6.6	2
	SI40-SS1	sub slab	1/30/10	0	ND(1.7)	ND(1.7)	ND(0.35)	ND(1.7)	ND(1.7)	860 J	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)
	SI40-SS1 Dup	sub slab	1/30/10	0	ND(0.87)	ND(0.87)	ND(0.17)	1.2	0.88	390 J	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	0.98	ND(0.87)
SI 41	SI41-IA1	indoor air	3/21/09	0	3.3	ND(0.8)	ND(0.16)	1.1	0.8	3.3 J	ND(0.8)	ND(0.8)	6.3	ND(0.8)	ND(0.8)	3.2	0.87
	SI41-IA1 Dup	indoor air	3/21/09	0	3.3	ND(0.79)	ND(0.16)	1	ND(0.79)	2.4 J	ND(0.79)	ND(0.79)	6.5	ND(0.79)	ND(0.79)	3.2	0.85
	SI41-IA2	indoor air	3/21/09	0	4.3	ND(0.77)	ND(0.15)	3.9	0.78	4.4	ND(0.77)	ND(0.77)	7.9	1	ND(0.77)	7.1	1.7
	SI41-CS1	crawlspace	3/21/09	0	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	1.1	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SI41-SS1	sub slab	3/21/09	0	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.73)	1 J	ND(0.73)	1	6.7	ND(0.73)	ND(0.73)	4.7	1.4
	SI41-SS1 Dup	sub slab	3/21/09	0	ND(0.73)	1.1	ND(0.15)	0.73	ND(0.73)	1.2 J	ND(0.73)	1	7.2	0.75	ND(0.73)	5.1	1.5

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SI 42	SI42-IA	indoor air	3/16/09	0	8.9	ND(0.88)	ND(0.18)	1.9	2.6	ND(0.88)	ND(0.88)	ND(0.88)	3.5	ND(0.88)	ND(0.88)	1.6	ND(0.88)
	SI42-IA	indoor air	1/26/10	0	2.2	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73) J	ND(0.73)	ND(0.73)	2.2	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)
	SI42-CS	crawlspace	3/16/09	0	8.1	ND(0.83)	ND(0.17)	1.8	2.4	ND(0.83)	ND(0.83)	ND(0.83)	1.8	1.1	ND(0.83)	1.5	ND(0.83)
	SI42-CS Dup	crawlspace	3/16/09	0	7.9	ND(1.2)	ND(0.25)	1.7	2.4	ND(1.2)	ND(1.2)	ND(1.2)	1.8	ND(1.2)	ND(1.2)	1.5	ND(1.2)
	SI42-CS	crawlspace	1/26/10	0	1.7	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83) J	ND(0.83)	ND(0.83)	1	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)
	SI42-SS1	sub slab	3/16/09	0	1.5	ND(0.76)	ND(0.15)	1.2	0.91	1.9	ND(0.76)	ND(0.76)	6	1.2	ND(0.76)	3	1.4
	SI42-SS1	sub slab	1/27/10	0	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	3.7 J	ND(0.72)	ND(0.72)	0.96	ND(0.72)	ND(0.72)	0.82	ND(0.72)
	SI42-SS1 Dup	sub slab	1/27/10	0	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.71)	79 J	ND(0.71)	ND(0.71)	0.97	ND(0.71)	ND(0.71)	0.79	ND(0.71)
SI 44	SI44-IA	indoor air	3/20/09	0	1.7	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.86)	1.3 J	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)
	SI44-IA Dup	indoor air	3/20/09	0	1.5	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.72)	2.5 J	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)
	SI44-IA	indoor air	1/24/10	0	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.97)	5.3	ND(0.97)	ND(0.97)	1.7	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)
	SI44-SS1	sub slab	3/20/09	0	2.6	ND(0.67)	ND(0.13)	1.1	1.4	2.3	ND(0.67)	ND(0.67)	4.8	1	ND(0.67)	3.1	1
	SI44-SS1	sub slab	1/25/10	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	1.9 J	ND(0.77)	ND(0.77)	0.8	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SI44-SS1 Dup	sub slab	1/25/10	0	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	2.9 J	ND(0.77)	ND(0.77)	1.1	ND(0.77)	ND(0.77)	0.99	ND(0.77)
	SI44-SS2	sub slab	3/20/09	0	120	2.1	ND(0.14)	32	77	1 J	1.3	ND(0.69)	4.7	2.4	1.3	7.5	0.82
	SI44-SS2	sub slab	1/25/10	0	1.2	ND(0.7)	ND(0.14)	0.74	ND(0.7)	3.3 J	ND(0.7)	ND(0.7)	1.9	ND(0.7)	ND(0.7)	1.1	ND(0.7)
SI 45	SI45-IA	indoor air	3/19/09	0	2.1	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.88)	1.3 J	ND(0.88)	ND(0.88)	1.8	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)
	SI45-IA	indoor air	1/23/10	0	2.3	ND(1.5)	ND(0.29)	ND(1.5)	1.5	12	ND(1.5)	3.1	10	ND(1.5)	ND(1.5)	2.6	ND(1.5)
	SI45-GA	garage air	3/19/09	0	7.8	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.95) J	ND(0.95)	ND(0.95)	6.6	1	ND(0.95)	4.1	1.2
	SI45-CS	crawlspace	3/19/09	0	2.6	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8) J	ND(0.8)	ND(0.8)	2.4	ND(0.8)	ND(0.8)	1.2	ND(0.8)
	SI45-CS	crawlspace	1/23/10	0	2.2	ND(0.92)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	3.2	0.99	ND(0.92)	1.6	ND(0.92)
	SI45-DP	deep probe	1/24/10	0	ND(0.78)	ND(0.78)	ND(0.16)	5	1.7	3.8	1.1	ND(0.78)	32	6.2	2.3	12	3.9
SI 46	SI46-IA	indoor air	3/19/09	0	7.4	ND(0.85)	ND(0.17)	2.5	5.6	3.6 J	ND(0.85)	1.2	19	4	1.2	13	4.2
	SI46-IA	indoor air	1/28/10	0	2.9	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	1.6	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)
	SI46-SS1	sub slab	3/19/09	0	1.6	1.1	ND(0.15)	1.1	1.1	8.4 J	ND(0.76)	ND(0.76)	5.7	ND(0.76)	ND(0.76)	2	ND(0.76)
	SI46-SS1	sub slab	1/29/10	0	ND(0.77)	3.1 J	ND(0.15)	0.89 J	ND(0.77)	7.3 J	ND(0.77)	ND(0.77)	2.7 J	ND(0.77)	ND(0.77)	0.79	ND(0.77)
	SI46-SS1 Dup	sub slab	1/29/10	0	ND(0.77)	ND(0.77) J	ND(0.15)	0.86 J	ND(0.77)	4.2 J	ND(0.77)	ND(0.77)	1.4 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SI46-SS2	sub slab	3/19/09	0	1.7	3	ND(0.14)	1.4	1.3	6.8	ND(0.7)	ND(0.7)	5	1.1	ND(0.7)	3.2	1.1
	SI46-SS2	sub slab	1/29/10	0	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	1.7	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
SI 47	SI47-IA	indoor air	3/19/09	0	31	ND(0.82)	ND(0.16)	2.2	3.5	13 J	3.4	ND(0.82)	83	18	5.6	55	18
	SI47-IA	indoor air	1/28/10	0	2.1	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	5	ND(0.7)	ND(0.7)	0.83	ND(0.7)
	SI47-GA	garage air	3/19/09	0	270	4.7	ND(0.16)	11	23	9.1	24	1.3	710	130	41	460	130
	SI47-GA	garage air	1/28/10	0	2.5	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)
	SI47-CS	crawlspace	3/19/09	0	26	ND(0.84)	ND(0.17)	1.9	2.9	12 J	2.8	ND(0.84)	71	14	4.6	47	15
	SI47-CS	crawlspace	1/28/10	0	1.9	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)
	SI47-SS1	sub slab	3/19/09	0	1	ND(0.72)	ND(0.14)	0.85	0.76	2.8	ND(0.72)	ND(0.72)	3.9	1.9	0.83	3.3	1.2
	SI47-SS1	sub slab	1/29/10	0	ND(0.76)	ND(0.76)	ND(0.15)	0.97	ND(0.76)	16	ND(0.76)	ND(0.76)	2.6	1.2	ND(0.76)	2.7	0.88
SI 49	SI49-IA	indoor air	3/21/09	0	1.2	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.81)	4.8 J	ND(0.81)	ND(0.81)	12	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)
	SI49-IA	indoor air	1/27/10	0	3.9	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77) J	ND(0.77)	ND(0.77)	1.5	ND(0.77)	ND(0.77)	0.84	ND(0.77)
	SI49-CS	crawlspace	3/21/09	0	0.82	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	1.9 J	ND(0.77)	ND(0.77)	2.4	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)
	SI49-CS	crawlspace	1/27/10	0	3.5	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87) J	ND(0.87)	ND(0.87)	1.1	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
SI 50	SI50-IA	indoor air	3/21/09	0	9	ND(0.77)	ND(0.15)	5.2	1.6	55	ND(0.77)	ND(0.77)	4.8	1.5	ND(0.77)	1.9	0.8
	SI50-IA	indoor air	1/29/10	0	6.2	ND(0.83)	ND(0.17)	0.92	0.96	20 J	ND(0.83)	ND(0.83)	7.2	4.2	1.3	7.7	3
	SI50-SS1	sub slab	3/21/09	0	1	ND(0.72)	ND(0.14)	1.2	1.2	4	ND(0.72)	ND(0.72)	3.6	0.76	ND(0.72)	1.9	ND(0.72)
	SI50-SS1	sub slab	1/29/10	0	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.82)	37 J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)
	SI50-SS2	sub slab	3/21/09	0	ND(0.66)	ND(0.66)	ND(0.13)	1.8	1.1	3.7 J	ND(0.66)	ND(0.66)	2.9	ND(0.66)	ND(0.66)	1.9	ND(0.66)
	SI50-SS2	sub slab	1/29/10	0	ND(3.7)	ND(3.7)	ND(0.74)	ND(3.7)	ND(3.7)	1200 J	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SIVW	SIVW1	nested well	5/11/06	5.3	68.4	1.44	ND(1.8)	--	--	--	1.74	0.737	40.2	2.47	ND(0.491)	21.3	9.81
	SIVW1	nested well	5/11/06	10.3	44.2	0.682	ND(1.8)	--	--	--	0.81	ND(0.426)	17.1	ND(0.491)	0.676	2.64	1.05
	SIVW1	nested well	5/11/06	14.3	195	1.12	ND(1.8)	--	--	--	1.15	ND(0.426)	39.6	1.09	ND(0.491)	11.3	7.58
	SIVW1	nested well	10/05/06	5.3	1.07 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	4.66 J	ND(0.491) J	ND(0.491) J	2.39 J	0.995 J
	SIVW1	nested well	10/05/06	10.3	1.5 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	4.69 J	ND(0.491) J	ND(0.491) J	1.95 J	0.77 J
	SIVW1	nested well	10/05/06	14.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	1.02 J	ND(0.491) J	ND(0.491) J	1.51 J	0.673 J
	SIVW2	nested well	5/11/06	5.3	115	0.669	ND(1.8)	--	--	--	0.588	ND(0.426)	11.1	0.637	ND(0.491)	5.12	2.08
	SIVW2	nested well	5/11/06	10.3	76.8	1.07	ND(3.6)	--	--	--	1.16	ND(0.851)	16	ND(0.982)	ND(0.982)	4.71	1.72
	SIVW2	nested well	5/11/06	15.3	160	1.19	ND(1.8)	--	--	--	1.31	ND(0.426)	35.2	2.66	0.866	19.8	5.96
	SIVW2	nested well	5/11/06	19.3	323	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	30.1	2.91	ND(0.982)	15.9	6.45
	SIVW2	nested well	9/21/06	5.3	ND(0.704) J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.887 J	ND(0.491) J	ND(0.491) J	ND(0.868) J	0.575 J
	SIVW2	nested well	9/21/06	10.3	1.12 J	ND(0.491) J	ND(1.8) J	--	--	--	0.894 J	2.3 J	2.25 J	1.32 J	0.625 J	4.6 J	1.43 J
	SIVW2	nested well	9/21/06	15.3	0.921 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	0.905 J	ND(0.491) J	ND(0.491) J	2.78 J	0.886 J
	SIVW2	nested well	9/21/06	19.3	91.6 J	ND(0.491) J	ND(1.8) J	--	--	--	ND(0.491) J	ND(0.426) J	12 J	1.02 J	ND(0.491) J	4.43 J	3.65 J
	SIVW3	nested well	5/11/06	5.3	650	183	ND(3.6)	--	--	--	252	ND(0.851)	591	515	ND(0.982)	730	494
	SIVW3	nested well	5/11/06	10.3	13800	1060	ND(304) J	--	--	--	1220	ND(71.9) J	14700	1800	ND(83) J	13100	6360
	SIVW3	nested well	5/11/06	15.3	1180000	2470	ND(6400) J	--	--	--	2540	ND(1510) J	99800	2870	3490	42000	17700
	SIVW3	nested well	10/07/06	5.3	23.9	ND(0.491)	ND(1.8)	--	--	--	0.865	ND(0.426)	3.2	15.8 J	4.94	4.41	8.01
	SIVW3	nested well	10/07/06	10.3	20.1	2.45	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	14	85 J	245	51.3	85.9
	SIVW3	nested well	10/07/06	15.3	2080000	3010	ND(8450)	--	--	--	ND(2300)	ND(2000)	105000	3930 J	3620	54200	25800
	SIVW3	nested well	10/07/06	19.3	18200	ND(48.2)	ND(177)	--	--	--	ND(48.2)	ND(41.7)	317	ND(48.2) J	ND(48.2)	117	ND(42.6)
	SIVW3	nested well	1/25/07	5.3	ND(0.704) R	ND(0.982) R	ND(1.8) R	--	--	--	ND(2.46) R	ND(2.13) R	2.43 R	ND(2.46) R	ND(2.46) R	ND(1.74) R	1.26 R
	SIVW3	nested well	1/25/07	10.3	406	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	16	6.3	31.8	8.45	7.66
	SIVW3	nested well	1/25/07	15.3	6200 R	2.22 R	ND(1.8) R	--	--	--	ND(2.46) R	ND(2.13) R	141 R	11.8 R	4.11 R	71.2 R	26.4 R
	SIVW3 Dup	nested well	1/25/07	10.3	337	ND(0.982)	ND(1.8)	--	--	--	ND(2.46)	ND(2.13) J	14.9	6.72	36.1	9.47	9.1
	SIVW4	nested well	5/11/06	5.3	275	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	29.9	0.909	ND(0.491)	9.18	4.58
	SIVW4	nested well	5/11/06	10.3	218	0.744	ND(1.8)	--	--	--	0.927	ND(0.426)	27.8	1.59	1.59	13.7	5.52
	SIVW4	nested well	5/11/06	15.3	117	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	41.6	ND(0.491)	ND(0.491)	3.1	1.42
	SIVW4	nested well	5/11/06	20.3	250	ND(0.982)	ND(3.6)	--	--	--	0.998	ND(0.851)	32.4	1.27	ND(0.982)	12.5	6.12
	SIVW4	nested well	5/11/06	25.3	599	ND(0.982)	ND(3.6)	--	--	--	ND(0.982)	ND(0.851)	84.4	2.46	ND(0.982)	30.2	15.4
	SIVW4	nested well	5/11/06	28.3	1700	ND(2.46)	ND(9)	--	--	--	ND(2.46)	ND(2.13)	131	4.18	ND(2.46)	54.1	25.8
	SIVW4	nested well	9/21/06	5.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	1.84 J	ND(0.491) J	ND(0.491)	10 J	2.89 J
	SIVW4	nested well	9/21/06	10.3	10	ND(1.58)	ND(5.81)	--	--	--	ND(1.58)	ND(1.37)	31.2 J	ND(1.58) J	ND(1.58) J	46 J	15.3 J
	SIVW4	nested well	9/21/06	15.3	331	ND(1.01)	ND(3.71)	--	--	--	ND(1.01)	ND(0.877)	23	ND(1.01) J	ND(1.01)	13.8	5.59
	SIVW4	nested well	9/21/06	20.3	206	0.668	ND(1.8)	--	--	--	0.742	ND(0.426)	45.1	2.52 J	1.52	20.6	10.5
	SIVW4	nested well	9/21/06	25.3	334	0.672	ND(1.8)	--	--	--	1.04	ND(0.426)	60.4	2.93 J	1.4	29.1	14.5
	SIVW4 Dup	nested well	9/21/06	5.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	1.03 J	ND(0.491) J	ND(0.491)	5.29 J	1.55 J
	SIVW4 Dup	nested well	9/21/06	10.3	8.26	ND(1.24)	ND(4.55)	--	--	--	ND(1.24)	ND(1.07)	23.4 J	ND(1.24) J	1.29 J	9.81 J	5.04 J

TABLE 6.2-1. SUMMARY OF PETROLEUM RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Hexane (ug/m³)	Isopropyl-benzene (ug/m³)	MTBE (ug/m³)	Nonane (ug/m³)	Octane (ug/m³)	Propene (ug/m³)	n-Propyl-benzene (ug/m³)	Styrene (ug/m³)	Toluene (ug/m³)	1,2,4-Trimethyl-benzene (ug/m³)	1,3,5-Trimethyl-benzene (ug/m³)	m,p-Xylene (ug/m³)	o-Xylene (ug/m³)
SIVW cont.	SIVW5	nested well	5/13/06	5.3	238 J	4	ND(3.6)	--	--	--	3.97	ND(0.851)	36.4	1.75	ND(0.982) J	18.6	5.49
	SIVW5	nested well	5/13/06	10.3	152 J	2.54 J	ND(3.6) J	--	--	--	2.31 J	ND(0.851) J	20.6 J	ND(0.982) J	1.4 J	8.4 J	2.95 J
	SIVW5	nested well	5/13/06	14.3	130 J	2.18 J	ND(3.6) J	--	--	--	1.99 J	ND(0.851) J	17.7 J	ND(0.982) J	1.21 J	7.37 J	2.56 J
	SIVW5 Dup	nested well	5/13/06	5.3	142 J	4.69	ND(3.6)	--	--	--	4.54	ND(0.851)	37.9	1.89	2.95 J	18.2	5.59
	SIVW5 Dup	nested well	5/13/06	10.3	159 J	5.26 J	ND(3.6) J	--	--	--	5.22 J	ND(0.851) J	42.1 J	2.19 J	3.4 J	20.3 J	6.26 J
	SIVW5	nested well	9/19/06	5.3	ND(0.704)	ND(0.491)	ND(1.8)	--	--	--	ND(0.491)	ND(0.426)	2.74	ND(0.491) J	ND(0.491)	1.26	0.667
	SIVW5	nested well	9/19/06	10.3	ND(0.939)	ND(0.655)	ND(2.4)	--	--	--	ND(0.655)	ND(0.567)	1.79	ND(0.655) J	ND(0.655)	ND(1.16)	ND(0.578)
	SIVW6	nested well	5/08/08	5	81	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	7.1	ND(2.7)	ND(2.7)	5.2	ND(2.7)
	SIVW6	nested well	5/08/08	10	120	ND(2.7)	ND(2.7)	--	--	--	ND(2.7)	ND(2.7)	4.4	ND(2.7)	ND(2.7)	7.8	3.2
	SIVW6	nested well	5/08/08	15	520	ND(2.5)	ND(2.5)	--	--	--	ND(2.5)	ND(2.5)	4.7	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
	SIVW6 Dup	nested well	5/08/08	0	85	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	5.9	ND(2.6)	ND(2.6)	5	ND(2.6)
	SIVW7	nested well	5/08/08	5	84	ND(2.6)	ND(2.6)	--	--	--	ND(2.6)	ND(2.6)	4.9	ND(2.6)	ND(2.6)	7.9	3.3
	SIVW7	nested well	5/08/08	15	500	ND(3.2)	ND(3.2)	--	--	--	ND(3.2)	ND(3.2)	9	ND(3.2)	ND(3.2)	6.4	3.4
MDEQ Indoor Air Screening Criteria					183	NA	NA	NA	NA	NA	NA	NA	1,304	2	NA	34	34
Regional Screening Level Residential Air Screening Level					NA	420	9.4	NA	NA	NA	1000	1000	NA	NA	NA	NA	NA

Notes:
J - Value is estimated
R - Value has been rejected and should not be used
ug/m^3 - micrograms per cubic meter
ft-bgs - feet below ground surface
ND - constituent not detected above reporting limit
Dup - duplicate sample
NA - Not applicable / no value provided
-- - Data not collected or analyzed

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
Outdoor Air	OA1	outdoor air	3/14/09	0	ND(6.4)	ND(0.64)	ND(0.64)	1.2	0.51	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	2.5	ND(0.13)
	OA1	outdoor air	3/15/09	0	ND(8.4)	ND(0.84)	ND(0.84)	ND(0.84)	0.43	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.17)
	OA1	outdoor air	3/16/09	0	ND(8.9)	ND(0.89)	ND(0.89)	1.6	0.48	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.18)
	OA1	outdoor air	3/17/09	0	ND(7.5)	ND(0.75)	ND(0.75)	1	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.15)
	OA1	outdoor air	3/18/09	0	ND(7.3)	ND(0.73)	ND(0.73)	0.92	0.54	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.15)
	OA1	outdoor air	3/19/09	0	ND(7.8)	ND(0.78)	ND(0.78)	0.95	0.44	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.16)
	OA1	outdoor air	3/20/09	0	ND(9.7)	ND(0.97)	ND(0.97)	ND(0.97)	0.48	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.19)
	OA1	outdoor air	3/21/09	0	ND(11)	ND(1.1)	ND(1.1)	2	0.4	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(1.1)	ND(1.1)	ND(0.21)
	OA1	outdoor air	6/03/09	0	9	ND(0.82)	ND(0.82) J	1.2	0.43	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.23	ND(0.82)	ND(0.82) J	ND(0.16)
	OA1	outdoor air	7/02/09	0	15	ND(0.81)	ND(0.81)	1.7	0.43	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	1	ND(0.81)	ND(0.81)	ND(0.16)
	OA2	outdoor air	3/14/09	0	ND(11)	ND(1.1)	ND(1.1)	ND(1.1)	0.48	ND(0.22)	ND(0.22)	ND(0.22)	ND(0.22)	ND(0.22)	ND(1.1)	ND(1.1)	ND(0.22)
	OA2	outdoor air	3/15/09	0	ND(7.5)	ND(0.75)	ND(0.75)	1.5	0.5	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.15	ND(0.75)	ND(0.75)	ND(0.15)
	OA2	outdoor air	3/16/09	0	ND(9.6)	ND(0.96)	ND(0.96)	ND(0.96)	0.49	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.19)
	OA2	outdoor air	3/17/09	0	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	0.55	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.15)
	OA2	outdoor air	3/18/09	0	ND(8.2)	ND(0.82)	ND(0.82)	ND(0.82)	0.51	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.16)
	OA2	outdoor air	3/19/09	0	8.1 J	ND(0.77)	ND(0.77)	0.87	0.42	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.15)
	OA2	outdoor air	3/20/09	0	38	ND(0.95)	ND(0.95)	8.6	0.53	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.95)	ND(0.19)
	OA2	outdoor air	3/21/09	0	8.9	ND(0.7)	ND(0.7)	2.8	0.55	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	2.4	ND(0.14)
	OA3	outdoor air	3/14/09	0	ND(7.8)	ND(0.78)	ND(0.78)	ND(0.78)	0.48	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.16)
	OA3	outdoor air	3/15/09	0	ND(7.9)	ND(0.79)	ND(0.79)	1.1	0.5	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.19	ND(0.79)	1.5	ND(0.16)
	OA3	outdoor air	3/16/09	0	ND(9.7)	ND(0.97)	ND(0.97)	1.3	0.47	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	1.5	ND(0.19)
	OA3	outdoor air	3/17/09	0	ND(8.7)	ND(0.87)	ND(0.87)	1	0.56	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.17)
	OA3	outdoor air	3/18/09	0	23 JB	ND(0.69)	ND(0.69)	3.8 JB	0.53	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.69)	ND(0.14)
	OA3	outdoor air	3/19/09	0	ND(8.5)	ND(0.85)	ND(0.85)	0.99	0.45	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.17)
	OA3	outdoor air	3/20/09	0	45	ND(0.96)	ND(0.96)	6.3	0.46	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.96)	ND(0.19)
	OA3	outdoor air	3/21/09	0	15	ND(0.78)	ND(0.78)	1.6	0.52	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.16)
	OA4	outdoor air	1/23/10	0	ND(7.7)	ND(0.77)	ND(0.77)	ND(7.7)	0.44	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	OA4	outdoor air	1/24/10	0	11 J	ND(0.79)	ND(0.79)	ND(7.9)	0.49	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	0.93	ND(0.79)
	OA4	outdoor air	1/25/10	0	ND(6)	ND(0.6)	ND(0.6)	ND(6)	0.51	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.6)	ND(0.6)	ND(0.6)
	OA4	outdoor air	1/26/10	0	20	ND(0.72)	ND(0.72)	ND(7.2)	0.41	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)
	OA4	outdoor air	1/27/10	0	ND(7.5)	ND(0.75)	ND(0.75)	ND(7.5)	0.4	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
	OA4	outdoor air	1/28/10	0	ND(8.9)	ND(0.89)	ND(0.89)	ND(8.9)	0.46	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89) J	ND(0.89)
	OA4	outdoor air	1/29/10	0	ND(7.9) J	ND(0.79)	ND(0.79)	ND(7.9)	0.41	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	0.83	ND(0.79)
	OA4	outdoor air	1/30/10	0	7.6 J	ND(0.7)	ND(0.7)	ND(7)	0.44	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)
	OA4	outdoor air	2/01/10	0	ND(8.9) J	ND(0.89)	ND(0.89)	ND(8.9)	0.41	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)
SI 01	SI1-IA	indoor air	3/18/09	0	18	2.2	ND(0.85)	3	0.63	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	5.9	ND(0.17)
	SI1-IA	indoor air	1/28/10	0	35 J	3.4	ND(0.89)	ND(8.9)	0.51	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	3.6	ND(0.89)
	SI1-GA	garage air	3/18/09	0	7.8	ND(0.77)	ND(0.77)	2.1	0.53	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.15)
	SI1-GA	garage air	1/28/10	0	8.5 J	ND(0.64)	ND(0.64)	ND(6.4)	0.47	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	23	ND(0.64)
	SI1-CS	crawlspace	3/18/09	0	15	ND(0.84)	ND(0.84)	2.5	0.26	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.17)
	SI1-CS	crawlspace	1/28/10	0	ND(8.4) J	ND(0.84)	ND(0.84)	ND(8.4)	0.46	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	1.6	ND(0.84)
SI 03	SI3-IA1	indoor air	3/15/09	0	33	ND(2.5)	ND(2.5)	4.3	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	9.8	ND(0.5)
	SI3-IA1	indoor air	6/03/09	0	26 J	ND(0.85)	ND(0.85) J	1.6	0.4	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.92	ND(0.85)	1.8 J	ND(0.17)
	SI3-IA1	indoor air	7/02/09	0	33	ND(0.98)	ND(0.98)	2	0.52	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	1.1	ND(0.98)	2.4	ND(0.2)
	SI3-IA1	indoor air	1/25/10	0	44	ND(0.89)	ND(0.89)	ND(8.9)	0.43	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	13	ND(0.89)
	SI3-IA1	indoor air	9/25/10	0	59	ND(0.85)	ND(0.85)	ND(8.5)	0.53	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	13	ND(0.85)
	SI3-IA1	indoor air	12/03/10	0	73	ND(0.85)	ND(0.85)	ND(8.5)	0.54	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	9.5	ND(0.85)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 03 cont.	SI3-IA1	indoor air	4/12/11	0	42	ND(0.86)	ND(0.86)	ND(8.6)	0.46	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.24	ND(0.86)	14	ND(0.86)
	SI3-IA1	indoor air	2/09/12	0	44	ND(0.91)	ND(0.91)	ND(9.1)	0.46	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	9.3 J	ND(0.91)
	SI3-IA1 Dup	indoor air	2/09/12	0	43	ND(0.94)	ND(0.94)	ND(9.4)	0.49	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.94)	15 J	ND(0.94)
	SI3-IA2	indoor air	3/15/09	0	59	ND(2.8)	ND(2.8)	5.8	ND(0.56)	ND(0.56)	ND(0.56)	ND(0.56)	ND(0.56)	ND(0.56)	ND(2.8)	62	ND(0.56)
	SI3-IA2	indoor air	6/03/09	0	27 J	ND(0.72)	ND(0.72) J	1.2	0.41	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	0.41	ND(0.72)	2.7 J	ND(0.14)
	SI3-IA2	indoor air	7/02/09	0	43	ND(0.76)	ND(0.76)	5.5	0.47	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	1	ND(0.76)	3.2	ND(0.15)
	SI3-IA2	indoor air	9/25/10	0	61	ND(0.83)	ND(0.83)	ND(8.3)	0.47	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	7.9	ND(0.83)
	SI3-IA2	indoor air	12/03/10	0	70	ND(1.2)	ND(1.2)	ND(12)	0.45	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(1.2)	22	ND(1.2)
	SI3-IA2	indoor air	2/09/12	0	56	ND(0.88)	ND(0.88)	ND(8.8)	0.48	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.88)	21	ND(0.88)
	SI3-GA	garage air	3/15/09	0	ND(8.9)	ND(0.89)	ND(0.89)	ND(0.89)	0.51	ND(0.18)	ND(0.18)	0.25	ND(0.18)	ND(0.18)	ND(0.89)	4	ND(0.18)
	SI3-GA	garage air	6/03/09	0	ND(99)	ND(9.9)	ND(9.9) J	ND(9.9)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(9.9)	ND(9.9) J	ND(2)
	SI3-GA	garage air	7/02/09	0	54	ND(0.89)	ND(0.89)	3.3	0.38	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	0.85	ND(0.89)	ND(0.89)	ND(0.18)
	SI3-GA	garage air	1/25/10	0	ND(8.2)	ND(0.82)	ND(0.82)	ND(8.2)	0.42	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SI3-GA	garage air	9/25/10	0	ND(6.4)	ND(0.64)	ND(0.64)	ND(6.4)	0.43	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	2.4	ND(0.64)
	SI3-GA	garage air	12/03/10	0	11	ND(0.75)	ND(0.75)	ND(7.5)	0.45	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	2.2	ND(0.75)
	SI3-GA	garage air	4/12/11	0	ND(7.8)	ND(0.78)	ND(0.78)	ND(7.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.28	ND(0.78)	7	ND(0.78)
	SI3-GA	garage air	2/09/12	0	ND(7.7)	ND(0.77)	ND(0.77)	ND(7.7)	0.46	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	16	ND(0.77)
	SI3-SS1	sub slab	3/16/09	0	32	3.5	ND(3.1)	ND(3.1)	ND(0.61)	ND(0.61)	ND(0.61)	ND(0.61)	ND(0.61)	ND(0.61)	ND(3.1)	ND(3.1)	ND(0.61)
	SI3-SS1	sub slab	6/02/09	0	15	ND(0.91)	ND(0.91) J	4.2	0.23	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	4.5	ND(0.91)	ND(0.91) J	ND(0.18)
	SI3-SS1	sub slab	7/02/09	0	66	1.1	ND(0.85)	14	0.36	ND(0.17)	ND(0.17)	0.21	ND(0.17)	4.4	ND(0.85)	5.5	ND(0.17)
	SI3-SS1	sub slab	1/26/10	0	47	ND(0.82)	ND(0.82)	ND(8.2)	0.44	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	4.7	ND(0.82)
	SI3-SS1	sub slab	9/25/10	0	49	6.2	ND(0.98)	ND(9.8)	0.46	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.98)	9.2	ND(0.98)
	SI3-SS1	sub slab	12/02/10	0	57	ND(0.82)	ND(0.82)	ND(8.2)	0.59	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	5.1	ND(0.82)
	SI3-SS1	sub slab	4/11/11	0	22	ND(0.85)	ND(0.85)	ND(8.5)	0.51	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.85)
	SI3-SS1	sub slab	2/09/12	0	45	ND(0.84)	ND(0.84)	ND(8.4)	0.51	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	4.4	ND(0.84)
	SI3-SS2	sub slab	3/16/09	0	51	ND(2.9)	ND(2.9)	ND(2.9)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)	ND(2.9)	ND(2.9)	ND(0.58)
	SI3-SS2	sub slab	6/02/09	0	12	ND(0.87)	ND(0.87) J	ND(0.87)	0.21	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87) J	ND(0.17)
	SI3-SS2	sub slab	7/02/09	0	22 J	ND(0.81)	ND(0.81)	1.3 JB	0.42	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	1.4	ND(0.81)	ND(0.81)	ND(0.16)
	SI3-SS2	sub slab	1/26/10	0	150	ND(0.82)	ND(0.82)	ND(8.2)	0.33	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SI3-SS2	sub slab	9/25/10	0	15	ND(0.79)	ND(0.79)	ND(7.9)	0.48	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	1.3	ND(0.79)
	SI3-SS2	sub slab	12/02/10	0	10	ND(0.95)	ND(0.95)	ND(9.5)	0.49	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	2.5	ND(0.95)
	SI3-SS2	sub slab	4/11/11	0	51	ND(2.4)	ND(2.4)	ND(24)	ND(0.48)	ND(0.48)	ND(0.48)	ND(0.48)	ND(0.48)	ND(0.48)	ND(2.4)	ND(2.4)	ND(2.4)
	SI3-SS2	sub slab	2/09/12	0	12	ND(0.79)	ND(0.79)	ND(7.9)	0.5	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.46	ND(0.79)	56	ND(0.79)
	SIOAH3	outdoor air	9/25/10	0	ND(8.5)	ND(0.85)	ND(0.85)	ND(8.5)	0.39	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	1.1	ND(0.85)
	SIOAH3	outdoor air	12/03/10	0	ND(8.2)	ND(0.82)	ND(0.82)	ND(8.2)	0.45	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	2.9	ND(0.82)
	SIOAH3	outdoor air	4/12/11	0	ND(9)	ND(0.9)	ND(0.9)	ND(9)	0.44	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	0.26	ND(0.9)	3.8	ND(0.9)
	SI3-NS	near slab	3/19/09	6.5	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.15)
	SI3-NS	near slab	3/19/09	11.5	ND(350000)	ND(35000)	ND(35000)	ND(35000)	ND(7100)	ND(7100)	ND(7100)	ND(7100)	ND(7100)	ND(7100)	ND(35000)	ND(35000)	ND(7100)
	SI3-NS Dup	near slab	3/19/09	11.5	ND(360000)	ND(36000)	ND(36000)	ND(36000)	ND(7200)	ND(7200)	ND(7200)	ND(7200)	ND(7200)	ND(7200)	ND(36000)	ND(36000)	ND(7200)
	SI3-NS	near slab	9/24/10	6.5	ND(4300)	ND(430)	ND(430)	ND(4300)	ND(85)	ND(85)	ND(85)	ND(85)	ND(85)	ND(85)	ND(430)	ND(430)	ND(430)
	SI3-NS	near slab	9/24/10	11.5	ND(400000)	ND(40000)	ND(40000)	ND(400000)	ND(8000)	ND(8000)	ND(8000)	ND(8000)	ND(8000)	ND(8000)	ND(40000)	ND(40000)	ND(40000)
	SI3-NS	near slab	12/02/10	6.5	ND(22)	ND(2.2)	ND(2.2)	ND(22)	ND(0.43)	ND(0.43)	ND(0.43)	ND(0.43)	ND(0.43)	ND(0.43)	ND(2.2)	2.6	ND(2.2)
	SI3-NS	near slab	12/02/10	11.5	ND(160000)	ND(16000)	ND(16000)	ND(160000)	ND(3200)	ND(3200)	ND(3200)	ND(3200)	ND(3200)	ND(3200)	ND(16000)	ND(16000)	ND(16000)
	SI3-NS	near slab	4/11/11	6.5	ND(20)	ND(2)	ND(2)	ND(20)	ND(0.41)	ND(0.41)	ND(0.41)	ND(0.41)	ND(0.41)	ND(0.41)	ND(2)	8.3	ND(2)
	SI3-NS	near slab	4/11/11	11.5	ND(280000)	ND(28000)	ND(28000)	ND(280000)	ND(5600)	ND(5600)	ND(5600)	ND(5600)	ND(5600)	ND(5600)	ND(28000)	ND(28000)	ND(28000)
	SI3-NS	near slab	2/08/12	6.5	ND(21)	ND(2.1)	ND(2.1)	ND(21)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)	ND(2.1)	ND(4.2)	ND(2.1)
	SI3-NS	near slab	2/08/12	11.5	ND(560000)	ND(56000)	ND(56000)	ND(560000)	ND(11000)	ND(11000)	ND(11000)	ND(11000)	ND(11000)	ND(11000)	ND(56000)	ND(110000)	ND(56000)
	SI3-FF	indoor air	1/25/10	0	50	ND(0.95)	ND(0.95)	ND(9.5)	0.4	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	12	ND(0.95)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 04	SI4-IA	indoor air	3/15/09	0	44	ND(0.82)	ND(0.82)	2.4 J	0.45	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	7.3 J	ND(0.16)
	SI4-IA Dup	indoor air	3/15/09	0	54	ND(0.86)	ND(0.86)	3.4 J	0.56	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	13 J	ND(0.17)
	SI4-IA	indoor air	1/23/10	0	54	ND(0.85)	ND(0.85)	ND(8.5)	0.37	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	13	ND(0.85)
	SI4-GA	garage air	3/15/09	0	41	ND(0.86)	ND(0.86)	18	0.63	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.24	ND(0.86)	3.3	ND(0.17)
	SI4-GA	garage air	1/23/10	0	34	ND(0.84)	ND(0.84)	ND(8.4)	0.43	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	5.7	ND(0.84)
	SI4-SS1	sub slab	3/15/09	0	38	ND(0.76)	ND(0.76)	2.9	ND(0.15)	ND(0.15)	ND(0.15)	0.8	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.15)
	SI4-SS1	sub slab	1/24/10	0	23	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	0.58	ND(0.15)	ND(0.15)	ND(0.77)	7.3	ND(0.77)
	SI4-SS2	sub slab	3/15/09	0	65	0.81	ND(0.71)	3.3	ND(0.14)	ND(0.14)	ND(0.14)	1.2	ND(0.14)	ND(0.14)	ND(0.71)	1	ND(0.14)
	SI4-SS2	sub slab	1/24/10	0	16	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.16)	1.4	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
SI 06	SI6-IA	indoor air	3/18/09	0	30	ND(0.87)	ND(0.87)	3.7	0.49	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	1.5	ND(0.17)
	SI6-IA Dup	indoor air	3/18/09	0	32	ND(0.85)	ND(0.85)	4.4	0.57	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.33	ND(0.85)	1.9	ND(0.17)
	SI6-SS1	sub slab	3/18/09	0	21	1.6	ND(0.69)	5.9	0.17	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	1.9	ND(0.14)
	SI6-SS2	sub slab	3/18/09	0	11	ND(0.67)	ND(0.67)	5.7	0.37	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	1.5	ND(0.13)
SI 07	SI7-IA	indoor air	3/21/09	0	40 J	ND(0.75)	ND(0.75)	6.1	0.38	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	3.6	ND(0.15)
	SI7-IA	indoor air	1/23/10	0	21	ND(0.97)	ND(0.97)	ND(9.7)	0.42	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	2.5	ND(0.97)
	SI7-GA	garage air	3/21/09	0	22 J	ND(1)	ND(1)	2.3	0.45	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(1)	1.6	ND(0.21)
	SI7-GA	garage air	1/23/10	0	15	ND(0.81)	ND(0.81)	ND(8.1)	0.35	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	0.96	ND(0.81)
	SI7-SS1	sub slab	3/22/09	0	12	1.2	ND(0.71)	2.9	0.18	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.14)
	SI7-SS1	sub slab	1/24/10	0	65 J	2.4	ND(0.84)	11	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.84)	ND(0.84)
	SI7-SS2	sub slab	3/22/09	0	11 J	ND(0.67)	ND(0.67)	2.2	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	0.31	ND(0.67)	ND(0.67)	ND(0.13)
	SI7-SS2	sub slab	1/24/10	0	21	2.7	ND(0.75)	ND(7.5)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
SI 08	SI8-IA	indoor air	3/17/09	0	49 J	ND(0.82)	ND(0.82)	2.2	0.54	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	2.9	ND(0.16)
	SI8-IA	indoor air	1/25/10	0	13 J	ND(0.75)	ND(0.75)	ND(7.5)	0.42	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
	SI8-CS	crawlspace	3/17/09	0	38 J	ND(0.8)	ND(0.8)	1.8	0.34	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	6	ND(0.16)
	SI8-CS	crawlspace	1/25/10	0	12 J	ND(0.97)	ND(0.97)	ND(9.7)	0.4	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.97)	ND(0.97)
	SI8-SS1	sub slab	3/17/09	0	33 J	0.88	ND(0.71)	2.8	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.71)	ND(0.14)
	SI8-SS1	sub slab	1/26/10	0	35	ND(0.74)	ND(0.74)	ND(7.4)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)
SI 09	SI9-IA	indoor air	3/21/09	0	48	ND(0.9)	ND(0.9)	5.3	0.46	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	14	ND(0.18)
	SI9-IA	indoor air	2/01/10	0	330 J	ND(0.82)	ND(0.82)	ND(8.2)	0.41	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	14	ND(0.82)
	SI9-CS	crawlspace	3/21/09	0	38	ND(0.7)	ND(0.7)	20	0.49	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	71	ND(0.14)
	SI9-CS	crawlspace	2/01/10	0	110 J	ND(0.88)	ND(0.88)	ND(8.8)	0.39	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.88)	4.1	ND(0.88)
	SI9-DP	deep probe	3/21/09	0	77	7	0.79	16	13	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.49	ND(0.77)	ND(0.77)	ND(0.15)
	SI9-SS1	sub slab	3/21/09	0	79	1.3	ND(0.66)	5.3	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	0.71	ND(0.13)
	SI9-SS1	sub slab	1/30/10	0	78 J	0.89	ND(0.82)	ND(8.2)	0.23	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
SI 10	SI10-IA	indoor air	3/17/09	0	22 J	ND(0.78)	ND(0.78)	1.8	0.55	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	2.4	ND(0.16)
	SI10-IA	indoor air	12/08/09	0	ND(8.5)	ND(0.85)	ND(0.85)	ND(8.5)	0.49	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(1.7)	ND(0.85)
	SI10-CS	crawlspace	3/17/09	0	ND(8.7)	ND(0.87)	ND(0.87)	1.3	0.54	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	0.87	ND(0.17)
	SI10-CS	crawlspace	2/01/10	0	12 J	ND(0.73)	ND(0.73)	ND(7.3)	0.38	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	0.89	ND(0.73)
	SI10-SS1	sub slab	3/17/09	0	21 J	ND(0.72)	ND(0.72)	2.3	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.14)
	SI10-SS1	sub slab	12/07/09	0	330	ND(11)	ND(11)	ND(110)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(11)	ND(21)	ND(11)
	SI10-SS1	sub slab	3/30/10	0	10	ND(0.86)	ND(0.86)	ND(8.6)	0.29	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)
	SI10-SS1	sub slab	4/23/10	0	ND(10)	ND(1)	ND(1)	ND(10)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(1)	ND(1)	ND(1)
	SI10-SS2	sub slab	3/17/09	0	13	ND(0.94)	ND(0.94)	1.2	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.94)	ND(0.94)	ND(0.19)
	SI10-SS2	sub slab	12/09/09	0	370	ND(11)	ND(11)	ND(110)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)	ND(11)	ND(23)	ND(11)
	SI10-SS2	sub slab	3/30/10	0	12	ND(0.8)	ND(0.8)	ND(8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)
	SI10-SS2	sub slab	4/23/10	0	13 J	ND(0.91)	ND(0.91)	ND(9.1)	0.26	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	21	ND(0.91)
	SI10-CS1	crawlspace	1/30/10	0	68 J	ND(0.79)	ND(0.79)	ND(7.9)	0.44	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI10-NS	near slab	12/09/09	4.3	270	ND(4.8)	ND(4.8)	ND(48)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(4.8)	ND(9.6)	ND(4.8)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 10 cont.	SI10-NS	near slab	12/09/09	8.3	1300	ND(38)	ND(38)	ND(380)	ND(7.7)	ND(7.7)	ND(7.7)	ND(7.7)	ND(7.7)	ND(7.7)	ND(38)	ND(77)	ND(38)
	SI10-NS	near slab	1/26/10	8.3	960	ND(2.4)	ND(2.4)	26	ND(0.47)	ND(0.47)	ND(0.47)	ND(0.47)	ND(0.47)	ND(0.47)	ND(2.4)	ND(2.4)	ND(2.4)
	SI10-NS	near slab	1/26/10	13.3	67	ND(3)	ND(3)	ND(30)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(3)	ND(3)	ND(3)
	SI10-NS	near slab	1/27/10	4.3	ND(28)	ND(2.8)	ND(2.8)	ND(28)	ND(0.55)	ND(0.55)	ND(0.55)	ND(0.55)	ND(0.55)	ND(0.55)	ND(2.8)	ND(2.8)	ND(2.8)
	SI10-NS	near slab	3/29/10	4.3	ND(27)	ND(2.7)	ND(2.7)	ND(27)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)	ND(2.7)	ND(2.7)	ND(2.7)
	SI10-NS	near slab	3/29/10	8.3	46	ND(2.7)	ND(2.7)	ND(27)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)	ND(2.7)	7.7	ND(2.7)
	SI10-NS	near slab	3/29/10	13.3	ND(29)	ND(2.9)	ND(2.9)	ND(29)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)	3.3	ND(2.9)	ND(2.9)
	SI10-NS	near slab	4/23/10	4.3	ND(23)	ND(2.3)	ND(2.3)	ND(23)	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)	ND(4.6)	ND(2.3)	ND(2.3)
	SI10-NS	near slab	4/23/10	8.3	ND(30)	ND(3)	ND(3)	ND(30)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	23	ND(3)	28	ND(3)
	SI10-NS	near slab	4/23/10	13.3	ND(21)	ND(2.1)	ND(2.1)	ND(21)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)	1.5	ND(2.1)	ND(2.1)	ND(2.1)
	SI10-OA	outdoor air	12/08/09	0	ND(7.2)	ND(0.72)	ND(0.72)	ND(7.2)	0.46	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(1.4)	ND(0.72)
	SI10-SS3	sub slab	1/26/10	0	29	ND(0.79)	ND(0.79)	ND(7.9)	0.19	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI10-SS3	sub slab	4/23/10	0	ND(10)	ND(1)	ND(1)	ND(10)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(1)	ND(1)	ND(1)
	SI10-SS4	sub slab	1/26/10	0	ND(7.4)	ND(0.74)	ND(0.74)	ND(7.4)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)
SI 12	SI12-IA	indoor air	3/14/09	0	26 J	ND(1.1)	ND(1.1)	4	0.48	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(1.1)	35	ND(0.21)
	SI12-IA	indoor air	1/27/10	0	49 J	ND(0.79)	ND(0.79)	ND(7.9)	0.46	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	2.4	ND(0.79)
	SI12-CS	crawlspace	3/14/09	0	ND(7.9)	ND(0.79)	ND(0.79)	0.88	0.49	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.16)
	SI12-CS	crawlspace	1/27/10	0	9.8	ND(0.74)	ND(0.74)	ND(7.4)	0.44	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.74)	ND(0.74)
SI 13	SI13-IA	indoor air	3/18/09	0	130	ND(2.2)	ND(2.2)	190	0.53	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.45)	ND(2.2)	5.4	ND(0.45)
	SI13-IA	indoor air	1/24/10	0	140	ND(0.92)	ND(0.92)	11	0.45	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	6.4	ND(0.92)
	SI13-GA	garage air	3/18/09	0	58 J	ND(0.93)	ND(0.93)	6.6	0.39	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.93)	ND(0.19)
	SI13-GA	garage air	1/24/10	0	73	0.88	ND(0.86)	37	0.45	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)
	SI13-SS1	sub slab	3/18/09	0	67	1.2	ND(0.75)	24	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.19	ND(0.75)	4.2	ND(0.15)
	SI13-SS1	sub slab	1/25/10	0	ND(8.2)	ND(0.82)	ND(0.82)	ND(8.2)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.95	ND(0.82)	ND(0.82)
	SI13-SS2	sub slab	3/18/09	0	58	0.86	ND(0.71)	17	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	0.27	ND(0.71)	8.2	ND(0.14)
	SI13-SS2	sub slab	1/25/10	0	52	ND(0.8)	ND(0.8)	ND(8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.8)
	SI13-SS2 Dup	sub slab	1/25/10	0	60	ND(0.81)	ND(0.81)	ND(8.1)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.81)
SI 14	SI14-IA	indoor air	3/16/09	0	ND(9.1)	ND(0.91)	ND(0.91)	1.6	0.51	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	1.2	ND(0.18)
	SI14-SS1	sub slab	3/16/09	0	74	ND(0.67)	ND(0.67)	4	0.35	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.67)	ND(0.13)
	SI14-SS2	sub slab	3/16/09	0	24	0.87	ND(0.75)	1.3	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.15)
SI 23	SI23-IA	indoor air	3/17/09	0	23 J	ND(0.74)	ND(0.74)	3.1	0.63	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.35	ND(0.74)	30	ND(0.15)
	SI23-IA	indoor air	1/27/10	0	21 J	ND(0.99)	ND(0.99)	ND(9.9)	0.57	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.99)	3.4 J	ND(0.99)
	SI23-GA	garage air	3/17/09	0	ND(6.4)	ND(0.64)	ND(0.64)	2.2	0.51	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	0.13	ND(0.64)	ND(0.64)	ND(0.13)
	SI23-GA	garage air	1/27/10	0	ND(7.9)	ND(0.79)	ND(0.79)	ND(7.9)	0.3	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79) J	ND(0.79)
	SI23-CS	crawlspace	3/17/09	0	17	ND(0.79)	ND(0.79)	3	0.56	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.16)
	SI23-CS	crawlspace	1/27/10	0	ND(8.5)	ND(0.85)	ND(0.85)	ND(8.5)	0.46	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85) J	ND(0.85)
	SI23-DP	deep probe	3/17/09	0	110	14	ND(0.98)	46	0.25	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	4.2	ND(0.98)	ND(0.98)	ND(0.2)
	SI23-DP	deep probe	1/28/10	0	16	0.83	ND(0.67)	9.2	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	0.19	ND(0.67)	ND(0.67) J	ND(0.67)
	SI23-SS1	sub slab	3/17/09	0	19	ND(0.72)	ND(0.72)	1.6	0.17	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.14)
	SI23-SS1 Dup	sub slab	3/17/09	0	17	ND(0.72)	ND(0.72)	1.3	0.18	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.14)
SI 24	SI24-IA	indoor air	3/21/09	0	11	ND(0.77)	ND(0.77)	1.7	0.41	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	0.86	ND(0.15)
	SI24-IA	indoor air	1/29/10	0	13 J	ND(0.56)	ND(0.56)	ND(5.6)	0.33	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.56)	0.97	ND(0.56)
	SI24-IA Dup	indoor air	1/29/10	0	15 J	ND(0.84)	ND(0.84)	ND(8.4)	0.4	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	1.5	ND(0.84)
	SI24-SS1	sub slab	3/22/09	0	18 J	1	ND(0.64)	4.3 J	0.24	0.21	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.64)	ND(0.13)
	SI24-SS1 Dup	sub slab	3/22/09	0	13 J	1.1	ND(0.65)	2.7 J	0.24	0.14	ND(0.13)	ND(0.13)	ND(0.13)	0.19	ND(0.65)	0.67	ND(0.13)
	SI24-SS1	sub slab	1/30/10	0	25 J	1.3	ND(0.68)	ND(6.8)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.68)	ND(0.68)	ND(0.68)
	SI24-SS2	sub slab	3/22/09	0	16 J	1.1	ND(0.66)	3	0.19	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.66)	ND(0.13)
	SI24-SS2	sub slab	1/30/10	0	18 J	1.3	ND(0.78)	ND(7.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 25	SI25-IA	indoor air	3/14/09	0	17 J	ND(0.82)	ND(0.82)	2.4	0.56	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.55	ND(0.82)	24	ND(0.16)
	SI25-IA	indoor air	1/24/10	0	30 J	ND(0.82)	ND(0.82)	ND(8.2)	0.49	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	5.4 J	ND(0.82)
	SI25-IA Dup	indoor air	1/24/10	0	44 J	ND(0.85)	ND(0.85)	ND(8.5)	0.51	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	3.9 J	ND(0.85)
	SI25-GA	garage air	3/14/09	0	24 J	ND(0.89)	ND(0.89)	2.1	0.47	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	2	ND(0.18)
	SI25-GA	garage air	1/24/10	0	38 J	ND(0.79)	ND(0.79)	ND(7.9)	0.44	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	2.3	ND(0.79)
	SI25-CS	crawlspace	3/14/09	0	ND(7.2)	ND(0.72)	ND(0.72)	1.2	0.53	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	0.78	ND(0.14)
	SI25-CS	crawlspace	1/24/10	0	ND(7.8)	ND(0.78)	ND(0.78)	ND(7.8)	0.45	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78)	ND(0.78)
	SI25-SS1	sub slab	3/14/09	0	ND(280)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(28)	ND(5.6)
	SI25-SS1 Dup	sub slab	3/14/09	0	ND(280)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(28)	ND(5.6)
	SI25-SS1	sub slab	1/26/10	0	22 J	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI25-SS1 Dup	sub slab	1/26/10	0	15 J	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
SI 26	SI26-IA	indoor air	3/14/09	0	ND(7.8)	ND(0.78)	ND(0.78)	3.2	0.51	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	9.1	ND(0.16)
	SI26-CS	crawlspace	3/14/09	0	ND(9.1)	ND(0.91)	ND(0.91)	ND(0.91)	0.48	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.91)	ND(0.18)
SI 27	SI27-IA	indoor air	3/15/09	0	ND(8.6)	ND(0.86)	ND(0.86)	1.6	0.58	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.17)
	SI27-CS	crawlspace	3/15/09	0	ND(8.5)	ND(0.85)	ND(0.85)	ND(0.85)	0.49	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.85)	ND(0.17)
SI 28	SI28-FFA	indoor air	3/20/09	0	190	ND(0.79)	ND(0.79)	24	0.54	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.33	ND(0.79)	20	ND(0.16)
	SI28-IA	indoor air	3/20/09	0	54	ND(0.78)	ND(0.78)	34	0.4	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.17	ND(0.78)	4.5	ND(0.16)
	SI28-IA	indoor air	1/27/10	0	21 J	ND(0.77)	ND(0.77)	19	0.38	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	1.7	ND(0.77)
	SI28-GA	garage air	3/20/09	0	9.7 J	ND(0.78)	ND(0.78)	1.2	0.44	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	3.2	ND(0.78)	ND(0.78)	ND(0.16)
	SI28-GA	garage air	1/27/10	0	ND(7.6)	ND(0.76)	ND(0.76)	ND(7.6)	0.45	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.66	ND(0.76)	ND(0.76)	ND(0.76)
	SI28-SS1	sub slab	3/20/09	0	50	0.89	ND(0.73)	6.8	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.15)
	SI28-SS1	sub slab	1/28/10	0	38 J	1.2	ND(0.79)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI28-SS1 Dup	sub slab	1/28/10	0	35 J	1.3	ND(0.79)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI28-SS2	sub slab	3/20/09	0	65	0.71	ND(0.69)	9.6	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	1.8	ND(0.14)
	SI28-SS2	sub slab	1/28/10	0	30 J	1.4	ND(0.76)	ND(7.6)	ND(0.15)	ND(0.15)	ND(0.15)	0.45	ND(0.15)	ND(0.15)	ND(0.76)	3.1	ND(0.76)
	SI28-NS	near slab	3/20/09	15	ND(7.3)	ND(0.73)	ND(0.73)	1.3	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	1	ND(0.15)
	SI28-NS	near slab	3/20/09	25	15	ND(0.77)	ND(0.77)	2.4	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.15)
	SI28-NS	near slab	3/21/09	5	22	ND(0.74)	ND(0.74)	5.8	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.28	ND(0.74)	ND(0.74)	ND(0.15)
	SI28-NS	near slab	3/21/09	10	9.2	2 J	ND(0.92)	4.1	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	12	ND(0.18)
	SI28-NS	near slab	3/21/09	20	15	3.5	ND(1.4)	18	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	0.57	ND(1.4)	ND(1.4)	ND(0.29)
	SI28-FF	indoor air	1/27/10	0	25 J	ND(1.1)	ND(1.1)	19	0.31	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(1.1)	1.4	ND(1.1)
SI 29	SI29-IA	indoor air	3/15/09	0	ND(7.3)	ND(0.73)	ND(0.73)	0.97	0.47	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	0.86	ND(0.15)
	SI29-IA	indoor air	1/25/10	0	20	ND(0.77)	ND(0.77)	ND(7.7)	0.39	ND(0.15)	ND(0.15)	ND(0.15)	0.18	ND(0.15)	ND(0.77)	2.4	ND(0.77)
	SI29-CS	crawlspace	3/15/09	0	ND(7.3)	ND(0.73)	ND(0.73)	1.6	0.58	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	3.8	ND(0.15)
	SI29-CS	crawlspace	1/25/10	0	11	ND(0.92)	ND(0.92)	ND(9.2)	0.4	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)
SI 30	SI30-IA	indoor air	3/16/09	0	11 J	ND(0.84)	ND(0.84)	5.4	0.51	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	1.4	ND(0.17)
	SI30-IA Dup	indoor air	3/16/09	0	9.8 J	ND(0.9)	ND(0.9)	5.4	0.48	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	0.96	ND(0.18)
	SI30-IA	indoor air	1/23/10	0	10	ND(0.91)	ND(0.91)	ND(9.1)	0.41	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	2.6	ND(0.91)
	SI30-SS1	sub slab	3/16/09	0	48	1.5	ND(0.69)	9.4	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	1.1	0.84	ND(0.14)
	SI30-SS2	sub slab	3/16/09	0	40	1.3	ND(0.68)	6.5	0.42	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.68)	ND(0.68)	ND(0.14)
	SI30-SS2 Dup	sub slab	3/16/09	0	36	1.3	ND(0.69)	5.9	0.48	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	1.2	ND(0.14)
SI 31	SI31-IA	indoor air	3/14/09	0	33	ND(0.97)	ND(0.97)	4.4	0.48	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	2.3	ND(0.19)
	SI31-IA	indoor air	1/28/10	0	61	ND(0.95)	ND(0.95)	ND(9.5)	0.51	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	2.9 J	ND(0.95)
	SI31-CS	crawlspace	3/14/09	0	38	ND(0.85)	ND(0.85)	4.8	0.48	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	2.5	ND(0.17)
	SI31-CS	crawlspace	1/28/10	0	23	ND(0.93)	ND(0.93)	ND(9.3)	0.45	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	1.4 J	ND(0.93)
	SI31-SS1	sub slab	3/14/09	0	18	0.83	ND(0.75)	3.3	0.24	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	1.8	ND(0.15)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 31 cont.	SI31-SS1	sub slab	1/29/10	0	28 J	2.8	ND(0.87)	ND(8.7)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87) J	ND(0.87)
	SI31-SS1 Dup	sub slab	1/29/10	0	28 J	3	ND(0.87)	ND(8.7)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87) J	ND(0.87)
	SI31-SS2	sub slab	3/14/09	0	10 J	0.87	ND(0.72)	1.7	0.15	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.14)
	SI31-SS2	sub slab	1/29/10	0	11	ND(0.78)	ND(0.78)	ND(7.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.78) J	ND(0.78)
SI 32	SI32-IA	indoor air	3/18/09	0	30	ND(2.6)	ND(2.6)	ND(2.6)	0.66	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(2.6)	ND(2.6)	ND(0.52)
	SI32-IA	indoor air	1/27/10	0	18	ND(0.95)	ND(0.95)	ND(9.5)	0.98	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	1.6 J	ND(0.95)
	SI32-CS	crawlspace	3/18/09	0	ND(11)	ND(1.1)	ND(1.1)	1.1	0.39	ND(0.22)	ND(0.22)	ND(0.22)	ND(0.22)	ND(0.22)	ND(1.1)	ND(1.1)	ND(0.22)
	SI32-CS	crawlspace	1/27/10	0	12 J	ND(0.87)	ND(0.87)	ND(8.7)	0.46	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87) J	ND(0.87)
	SI32-DP	deep probe	3/18/09	0	15 J	ND(0.71)	ND(0.71)	7.9	0.22	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	1.6	ND(0.71)	2.3	ND(0.14)
	SI32-DP Dup	deep probe	3/18/09	0	21 J	ND(0.71)	ND(0.71)	7.8	0.24	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	1.7	ND(0.71)	2.5	ND(0.14)
	SI32-DP	deep probe	1/28/10	0	130 J	ND(1.5)	ND(1.5)	ND(15)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	32	ND(1.5)	ND(1.5)	ND(1.5)
	SI32-DP Dup	deep probe	1/28/10	0	160 J	ND(0.91)	ND(0.91)	9.6	0.28	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	32	ND(0.91)	ND(0.91)	ND(0.91)
SI 33	SI33-IA	indoor air	3/15/09	0	41	ND(0.87)	ND(0.87)	4	0.52	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.31	ND(0.87)	12	ND(0.17)
	SI33-IA	indoor air	1/23/10	0	37	ND(0.67)	ND(0.67)	ND(6.7)	0.46	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	8.4	ND(0.67)
	SI33-CS	crawlspace	3/15/09	0	17	ND(0.87)	ND(0.87)	2.1	0.5	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.18	ND(0.87)	2.5	ND(0.17)
	SI33-CS	crawlspace	1/23/10	0	11	ND(0.93)	ND(0.93)	ND(9.3)	0.4	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	4.4	ND(0.93)
	SI33-GA	garage air	1/23/10	0	24	ND(0.87)	ND(0.87)	ND(8.7)	0.42	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	5.4	ND(0.87)
SI 34	SI34-IA	indoor air	3/14/09	0	25 J	ND(0.96)	ND(0.96)	3.5	0.38	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	14	ND(0.19)
	SI34-CS	crawlspace	3/14/09	0	17 J	ND(0.82)	ND(0.82)	3.5 J	0.45	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82) J	ND(0.16)
	SI34-CS Dup	crawlspace	3/14/09	0	6.6 J	ND(0.64)	ND(0.64)	0.97 J	0.52	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	2.1 J	ND(0.13)
	SI34-DP	deep probe	3/14/09	0	15 J	ND(0.82)	ND(0.82)	4.1	0.47	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	1.8	ND(0.82)	1.9	ND(0.16)
SI 35	SI35-IA	indoor air	3/15/09	0	23	ND(0.86)	ND(0.86)	5.5	0.56	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	2.4	ND(0.17)
	SI35-IA	indoor air	1/26/10	0	29	ND(0.81)	ND(0.81)	ND(8.1)	0.46	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	1.3	ND(0.81)
	SI35-GA	garage air	3/15/09	0	11 J	ND(0.8)	ND(0.8)	2	0.47	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	1.1	ND(0.16)
	SI35-GA	garage air	1/26/10	0	ND(7.5)	ND(0.75)	ND(0.75)	ND(7.5)	0.44	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.75)	ND(0.75)
	SI35-SS1	sub slab	3/15/09	0	30	2.8	ND(0.66)	4	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	0.71	ND(0.13)
	SI35-SS1	sub slab	1/27/10	0	82 J	1.8	ND(1.2)	13	ND(0.24)	ND(0.24)	ND(0.24)	ND(0.24)	ND(0.24)	ND(0.24)	ND(1.2)	ND(1.2)	ND(1.2)
	SI35-SS2	sub slab	3/15/09	0	21	ND(0.7)	ND(0.7)	2.3	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.14)
	SI35-SS2	sub slab	1/27/10	0	9.2	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
SI 36	SI36-IA	indoor air	3/17/09	0	170 J	ND(0.93)	ND(0.93)	4.4	0.53	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	22	ND(0.19)
	SI36-IA	indoor air	1/26/10	0	52 J	ND(0.94)	ND(0.94)	ND(9.4)	0.4	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.94)	4.5	ND(0.94)
	SI36-CS	crawlspace	3/17/09	0	7.9 J	ND(0.72)	ND(0.72)	2	0.58	ND(0.14)	ND(0.14)	0.21	ND(0.14)	0.5	ND(0.72)	15	ND(0.14)
	SI36-CS	crawlspace	1/26/10	0	6.6	ND(0.65)	ND(0.65)	ND(6.5)	0.44	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.65)	ND(0.65)
SI 37	SI37-IA	indoor air	3/17/09	0	39	ND(0.82)	ND(0.82)	50	1.3	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	1.2	ND(0.16)
	SI37-IA	indoor air	1/26/10	0	11	ND(0.86)	ND(0.86)	47	0.23	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.86)
	SI37-SS1	sub slab	3/17/09	0	48	0.98	ND(0.65)	12	0.25	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.65)	ND(0.13)
	SI37-SS1	sub slab	1/27/10	0	220 J	ND(1.5)	ND(1.5)	ND(15)	0.48	ND(0.31)	ND(0.31)	ND(0.31)	ND(0.31)	ND(0.31)	ND(1.5)	ND(1.5)	ND(1.5)
	SI37-SS1 Dup	sub slab	1/27/10	0	97 J	0.9	ND(0.79)	ND(7.9)	0.53	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.79)
	SI37-SS2	sub slab	3/17/09	0	16	1.2	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.14)
SI 38	SI38-IA	indoor air	3/17/09	0	140 J	51	7.1	25	0.56	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	27	ND(0.18)
	SI38-IA	indoor air	1/25/10	0	89 J	12	1.2	8.8	0.45	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	10	ND(0.85)
	SI38-CS	crawlspace	3/17/09	0	11 J	ND(0.79)	ND(0.79)	1.8 J	0.57	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79)	ND(0.16)
	SI38-CS Dup	crawlspace	3/17/09	0	9.3 J	ND(0.86)	ND(0.86)	1.2 J	0.5	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.17)
	SI38-CS	crawlspace	1/25/10	0	ND(8.9)	ND(0.89)	ND(0.89)	ND(8.9)	0.42	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.89)	ND(0.89)
SI 39	SI39-IA	indoor air	3/19/09	0	30	ND(0.85)	ND(0.85)	3.7	0.55	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	2.6	ND(0.17)
	SI39-IA Dup	indoor air	3/19/09	0	33	ND(0.9)	ND(0.9)	3.8	0.51	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	2.6	ND(0.18)
	SI39-IA	indoor air	1/24/10	0	23 J	ND(0.83)	ND(0.83)	ND(8.3)	0.48	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	1.1	ND(0.83)
	SI39-SS1	sub slab	3/19/09	0	54	10	0.79	7	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.87	1.7	ND(0.15)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 39 cont.	SI39-SS1	sub slab	1/25/10	0	42	3.5	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI39-SS2	sub slab	3/19/09	0	35	2.8	ND(0.75)	7.4	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	1.2	ND(0.15)
	SI39-SS2	sub slab	1/25/10	0	ND(8.3)	ND(0.83)	ND(0.83)	ND(8.3)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)
SI 40	SI40-IA1	indoor air	3/21/09	0	20 J	ND(0.93)	ND(0.93)	2.5	0.44	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	1.5	ND(0.19)
	SI40-IA1	indoor air	2/01/10	0	16	ND(0.9)	ND(0.9)	ND(9)	0.41	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	3.8	ND(0.9)
	SI40-IA2	indoor air	3/21/09	0	34 J	ND(0.79)	ND(0.79)	3.5	0.48	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	1.4	ND(0.16)
	SI40-IA2	indoor air	2/01/10	0	30	ND(0.85)	ND(0.85)	ND(8.5)	0.45	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	1.4	ND(0.85)
	SI40-IA3	indoor air	3/21/09	0	39 J	ND(0.8)	ND(0.8)	4.4	0.53	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	0.18	ND(0.8)	2.4	ND(0.16)
	SI40-IA3	indoor air	2/01/10	0	18	ND(0.71)	ND(0.71)	ND(7.1)	0.26	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	1.2	ND(0.71)
	SI40-CS1	crawlspace	3/21/09	0	10 J	ND(0.87)	ND(0.87)	1.2	0.38	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	1.3	ND(0.17)
	SI40-CS1 Dup	crawlspace	3/21/09	0	11 J	ND(0.82)	ND(0.82)	1.3	0.41	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	1.4	ND(0.16)
	SI40-CS1	crawlspace	2/01/10	0	34 J	ND(0.96)	ND(0.96)	ND(9.6)	0.39	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	1.3	ND(0.96)
	SI40-CS1 Dup	crawlspace	2/01/10	0	25 J	ND(0.97)	ND(0.97)	ND(9.7)	0.39	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	1.6	ND(0.97)
	SI40-CS2	crawlspace	3/21/09	0	17 J	ND(0.85)	ND(0.85)	1.6	0.44	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	1.3	ND(0.17)
	SI40-CS2	crawlspace	2/01/10	0	15	ND(0.92)	ND(0.92)	ND(9.2)	0.35	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)
	SI40-SS1	sub slab	3/21/09	0	79	1.3	ND(0.8)	8.5	0.25	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	2.8	ND(0.16)
	SI40-SS1	sub slab	1/30/10	0	140 J	ND(1.7)	ND(1.7)	ND(17)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(1.7)	12 J	ND(1.7)
	SI40-SS1 Dup	sub slab	1/30/10	0	44 J	ND(0.87)	ND(0.87)	ND(8.7)	0.19	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87) J	ND(0.87)
SI 41	SI41-IA1	indoor air	3/21/09	0	35	ND(0.8)	ND(0.8)	3.1	0.47	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	4 J	ND(0.16)
	SI41-IA1 Dup	indoor air	3/21/09	0	38	ND(0.79)	ND(0.79)	3.5	0.46	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	12 J	ND(0.16)
	SI41-IA2	indoor air	3/21/09	0	44	ND(0.77)	ND(0.77)	4.5	0.44	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	3	ND(0.15)
	SI41-CS1	crawlspace	3/21/09	0	13	ND(0.86)	ND(0.86)	1.7	0.44	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	9.6	ND(0.17)
	SI41-SS1	sub slab	3/21/09	0	83	3.3	ND(0.73)	2.7 J	0.26	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.15)
	SI41-SS1 Dup	sub slab	3/21/09	0	93	3.7	ND(0.73)	3.6 J	0.27	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	0.97	ND(0.15)
SI 42	SI42-IA	indoor air	3/16/09	0	17 J	ND(0.88)	ND(0.88)	1.5	0.52	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	0.18	ND(0.88)	2	ND(0.18)
	SI42-IA	indoor air	1/26/10	0	19	ND(0.73)	ND(0.73)	ND(7.3)	0.44	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.73)	ND(0.73)
	SI42-CS	crawlspace	3/16/09	0	10 J	ND(0.83)	ND(0.83)	1.5	0.5	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	1	ND(0.17)
	SI42-CS Dup	crawlspace	3/16/09	0	ND(12)	ND(1.2)	ND(1.2)	2.1	0.49	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(1.2)	ND(1.2)	ND(0.25)
	SI42-CS	crawlspace	1/26/10	0	16	ND(0.83)	ND(0.83)	ND(8.3)	0.47	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.83)	ND(0.83)
	SI42-SS1	sub slab	3/16/09	0	17 J	1.8	ND(0.76)	4.6	0.3	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.76)	ND(0.15)
	SI42-SS1	sub slab	1/27/10	0	50	11	0.97	8.3	0.26	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.72)
	SI42-SS1 Dup	sub slab	1/27/10	0	62	11	1	8.4	0.32	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	1.3	ND(0.71)	ND(0.71)
SI 44	SI44-IA	indoor air	3/20/09	0	9.6 J	ND(0.86)	ND(0.86)	1	0.44	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.86)	ND(0.17)
	SI44-IA Dup	indoor air	3/20/09	0	9.4 J	ND(0.72)	ND(0.72)	1.1	0.38	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.72)	ND(0.14)
	SI44-IA	indoor air	1/24/10	0	12 J	ND(0.97)	ND(0.97)	ND(9.7)	0.3	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	0.98	ND(0.97)
	SI44-SS1	sub slab	3/20/09	0	22	2.1	ND(0.67)	3.5	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	1.9	ND(0.13)
	SI44-SS1	sub slab	1/25/10	0	19 J	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI44-SS1 Dup	sub slab	1/25/10	0	15 J	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	1.1	ND(0.77)
	SI44-SS2	sub slab	3/20/09	0	19	2.4	ND(0.69)	2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	0.14	ND(0.69)	2.7	ND(0.14)
	SI44-SS2	sub slab	1/25/10	0	23 J	2.9	ND(0.7)	ND(7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.7)	ND(0.7)
SI 45	SI45-IA	indoor air	3/19/09	0	17 J	ND(0.88)	ND(0.88)	1.5	0.39	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.88)	7.9	ND(0.18)
	SI45-IA	indoor air	1/23/10	0	28 J	ND(1.5)	ND(1.5)	ND(15)	0.33	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)	ND(1.5)	3.4	ND(1.5)
	SI45-GA	garage air	3/19/09	0	15	ND(0.95)	ND(0.95)	2.8	0.47	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	1.3	ND(0.19)
	SI45-CS	crawlspace	3/19/09	0	15	ND(0.8)	ND(0.8)	1.1	0.4	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.8)	ND(0.16)
	SI45-CS	crawlspace	1/23/10	0	ND(9.2)	ND(0.92)	ND(0.92)	ND(9.2)	0.43	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.92)	ND(0.92)
	SI45-DP	deep probe	1/24/10	0	31	ND(0.78)	ND(0.78)	13	0.24	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	16	ND(0.78)	1.1	ND(0.78)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acetone (ug/m³)	Acetonitrile (ug/m³)	Acrylo Nitrile (ug/m³)	2-Butanone (ug/m³)	Carbon tetrachloride (ug/m³)	Chlorobenzene (ug/m³)	1,1-Dichloro-ethane (ug/m³)	1,1-Dichloro-ethene (ug/m³)	cis-1,2-Dichloro-ethene (ug/m³)	trans-1,2-Dichloro-ethene (ug/m³)	1,4-Dioxane (ug/m³)	Ethyl acetate (ug/m³)	Hexachloro-butadiene (ug/m³)
SI 46	SI46-IA	indoor air	3/19/09	0	51	ND(0.85)	ND(0.85)	5.1	0.47	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.17	ND(0.85)	5.3	ND(0.17)
	SI46-IA	indoor air	1/28/10	0	20 J	ND(0.93)	ND(0.93)	ND(9.3)	0.19	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.93) J	ND(0.93)
	SI46-SS1	sub slab	3/19/09	0	150	ND(0.76)	ND(0.76)	5	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.21	ND(0.76)	3.4	ND(0.15)
	SI46-SS1	sub slab	1/29/10	0	57	ND(0.77)	ND(0.77)	8	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	5.5 J	ND(0.77)
	SI46-SS1 Dup	sub slab	1/29/10	0	56	0.87	ND(0.77)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	1.8 J	ND(0.77)
	SI46-SS2	sub slab	3/19/09	0	160	2.5	ND(0.7)	5	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	0.26	0.9	2.3	ND(0.14)
	SI46-SS2	sub slab	1/29/10	0	8.5	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79) J	ND(0.79)
SI 47	SI47-IA	indoor air	3/19/09	0	38	2	ND(0.82)	5.3	0.42	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	1.3	ND(0.16)
	SI47-IA	indoor air	1/28/10	0	13	ND(0.7)	ND(0.7)	ND(7)	0.48	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	42 J	ND(0.7)
	SI47-GA	garage air	3/19/09	0	31	ND(0.81)	ND(0.81)	6.7	0.38	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.81)	ND(0.16)
	SI47-GA	garage air	1/28/10	0	9.6	ND(0.79)	ND(0.79)	ND(7.9)	0.38	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.79) J	ND(0.79)
	SI47-CS	crawlspace	3/19/09	0	38	1.7	ND(0.84)	5.6	0.41	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	0.19	ND(0.84)	1.8	ND(0.17)
	SI47-CS	crawlspace	1/28/10	0	8.2	ND(0.69)	ND(0.69)	ND(6.9)	0.46	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.69) J	ND(0.69)
	SI47-SS1	sub slab	3/19/09	0	35	9.4	ND(0.72)	5.1	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	0.92	ND(0.14)
	SI47-SS1	sub slab	1/29/10	0	30	1.6	ND(0.76)	ND(7.6)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.76) J	ND(0.76)
SI 49	SI49-IA	indoor air	3/21/09	0	18	ND(0.81)	ND(0.81)	2	0.43	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	61	ND(0.16)
	SI49-IA	indoor air	1/27/10	0	19 J	ND(0.77)	ND(0.77)	ND(7.7)	0.44	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.77)	ND(0.77)
	SI49-CS	crawlspace	3/21/09	0	11	ND(0.77)	ND(0.77)	1.4	0.41	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	7.5	ND(0.15)
	SI49-CS	crawlspace	1/27/10	0	12 J	ND(0.87)	ND(0.87)	ND(8.7)	0.41	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.87)	ND(0.87)
SI 50	SI50-IA	indoor air	3/21/09	0	390	ND(0.77)	ND(0.77)	6.3	0.96	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	4.5	ND(0.15)
	SI50-IA	indoor air	1/29/10	0	44 J	ND(0.83)	ND(0.83)	ND(8.3)	0.56	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	1.4	ND(0.83)
	SI50-SS1	sub slab	3/21/09	0	19	1.4	ND(0.72)	2.6	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	2	ND(0.72)	ND(0.14)
	SI50-SS1	sub slab	1/29/10	0	17 J	ND(0.82)	ND(0.82)	ND(8.2)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.82)	ND(0.82)
	SI50-SS2	sub slab	3/21/09	0	18	0.73	ND(0.66)	2.5	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.66)	ND(0.13)
	SI50-SS2	sub slab	1/29/10	0	130 J	ND(3.7)	ND(3.7)	ND(37)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(3.7)	ND(3.7)	ND(3.7)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
Outdoor Air	OA1	outdoor air	3/14/09	0	ND(0.64)	0.79	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	OA1	outdoor air	3/15/09	0	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	OA1	outdoor air	3/16/09	0	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	OA1	outdoor air	3/17/09	0	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA1	outdoor air	3/18/09	0	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA1	outdoor air	3/19/09	0	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78) J	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA1	outdoor air	3/20/09	0	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	OA1	outdoor air	3/21/09	0	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.21)	ND(0.21)	ND(1.1)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)
	OA1	outdoor air	6/03/09	0	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	0.31	ND(0.16)
	OA1	outdoor air	7/02/09	0	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA2	outdoor air	3/14/09	0	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.22)	ND(0.22)	ND(1.1)	ND(0.22)	ND(0.22)	0.26	ND(0.22)
	OA2	outdoor air	3/15/09	0	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA2	outdoor air	3/16/09	0	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	OA2	outdoor air	3/17/09	0	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA2	outdoor air	3/18/09	0	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA2	outdoor air	3/19/09	0	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77) J	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA2	outdoor air	3/20/09	0	1.5	0.96	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	OA2	outdoor air	3/21/09	0	ND(0.7)	1.2	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	OA3	outdoor air	3/14/09	0	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA3	outdoor air	3/15/09	0	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA3	outdoor air	3/16/09	0	ND(0.97)	1.6	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	OA3	outdoor air	3/17/09	0	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	OA3	outdoor air	3/18/09	0	ND(0.69)	1.1	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	OA3	outdoor air	3/19/09	0	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85) J	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	OA3	outdoor air	3/20/09	0	1.3	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	OA3	outdoor air	3/21/09	0	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA4	outdoor air	1/23/10	0	ND(0.77)	ND(1.5)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA4	outdoor air	1/24/10	0	ND(0.79)	ND(1.6)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA4	outdoor air	1/25/10	0	ND(0.6)	ND(1.2)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.12)	ND(0.12)	ND(0.6)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)
	OA4	outdoor air	1/26/10	0	1.8	ND(1.4) J	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	0.9	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	OA4	outdoor air	1/27/10	0	ND(0.75)	ND(1.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	OA4	outdoor air	1/28/10	0	ND(0.89)	ND(1.8)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18) J	ND(0.18)
	OA4	outdoor air	1/29/10	0	ND(0.79)	ND(1.6) J	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	OA4	outdoor air	1/30/10	0	ND(0.7)	2.4 J	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	OA4	outdoor air	2/01/10	0	ND(0.89)	ND(1.8) J	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
SI 01	SI1-IA	indoor air	3/18/09	0	ND(0.85)	5.1	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI1-IA	indoor air	1/28/10	0	1.1	9 J	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI1-GA	garage air	3/18/09	0	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI1-GA	garage air	1/28/10	0	ND(0.64)	1.5 J	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI1-CS	crawlspace	3/18/09	0	ND(0.84)	1.7	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI1-CS	crawlspace	1/28/10	0	ND(0.84)	ND(1.7) J	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.17)	1.7	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
SI 03	SI3-IA1	indoor air	3/15/09	0	ND(2.5)	46	ND(2.5)	ND(2.5)	ND(2.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	SI3-IA1	indoor air	6/03/09	0	ND(0.85)	3.8	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI3-IA1	indoor air	7/02/09	0	ND(0.98)	28	ND(0.98)	ND(0.98)	ND(0.98)	ND(0.2)	ND(0.2)	ND(0.98)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
	SI3-IA1	indoor air	1/25/10	0	ND(0.89)	17 J	ND(0.89)	ND(0.89)	2.3	ND(0.18)	0.19	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-IA1	indoor air	9/25/10	0	ND(0.85)	18	ND(0.85)	ND(0.85)	1.9	ND(0.17)	1.5	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI3-IA1	indoor air	12/03/10	0	ND(0.85)	20	ND(0.85)	ND(0.85)	1.7	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
SI 03 cont.	SI3-IA1	indoor air	4/12/11	0	ND(0.86)	13	ND(0.86)	ND(0.86)	1.2	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI3-IA1	indoor air	2/09/12	0	ND(0.91)	140	ND(0.91)	ND(0.91)	1.2	ND(0.18)	ND(0.18)	2.6	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-IA1 Dup	indoor air	2/09/12	0	ND(0.94)	140	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.19)	ND(0.19)	2.5	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI3-IA2	indoor air	3/15/09	0	ND(2.8)	200	ND(2.8)	ND(2.8)	ND(2.8)	ND(0.56)	ND(0.56)	ND(2.8)	ND(0.56)	ND(0.56)	ND(0.56)	ND(0.56)
	SI3-IA2	indoor air	6/03/09	0	ND(0.72)	6.1	ND(0.72)	ND(0.72)	1.2	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI3-IA2	indoor air	7/02/09	0	ND(0.76)	46	ND(0.76)	ND(0.76)	0.93	ND(0.15)	ND(0.15)	1.3	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI3-IA2	indoor air	9/25/10	0	ND(0.83)	12	ND(0.83)	ND(0.83)	1.1	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI3-IA2	indoor air	12/03/10	0	ND(1.2)	17	ND(1.2)	ND(1.2)	ND(1.2)	ND(0.25)	ND(0.25)	ND(1.2)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
	SI3-IA2	indoor air	2/09/12	0	ND(0.88)	280	ND(0.88)	ND(0.88)	1.6	ND(0.18)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-GA	garage air	3/15/09	0	ND(0.89)	0.91	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-GA	garage air	6/03/09	0	ND(9.9)	ND(9.9)	ND(9.9)	ND(9.9)	ND(9.9)	ND(2)	ND(2)	ND(9.9)	ND(2)	ND(2)	ND(2)	ND(2)
	SI3-GA	garage air	7/02/09	0	ND(0.89)	1.9	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-GA	garage air	1/25/10	0	ND(0.82)	ND(1.6) J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	0.87	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI3-GA	garage air	9/25/10	0	ND(0.64)	ND(1.3)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI3-GA	garage air	12/03/10	0	ND(0.75)	ND(1.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI3-GA	garage air	4/12/11	0	ND(0.78)	ND(1.6)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI3-GA	garage air	2/09/12	0	ND(0.77)	1.7	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	0.8	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI3-SS1	sub slab	3/16/09	0	ND(3.1)	3.1	ND(3.1)	ND(3.1)	ND(3.1)	ND(0.61)	ND(0.61)	ND(3.1)	ND(0.61)	ND(0.61)	ND(0.61)	ND(0.61)
	SI3-SS1	sub slab	6/02/09	0	ND(0.91)	2	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-SS1	sub slab	7/02/09	0	0.94	55	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	0.2	7.7	ND(0.17)	ND(0.17)	1.1	ND(0.17)
	SI3-SS1	sub slab	1/26/10	0	ND(0.82)	32 J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	1.4 J	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI3-SS1	sub slab	9/25/10	0	ND(0.98)	16	ND(0.98)	ND(0.98)	ND(0.98)	ND(0.2)	ND(0.2)	2.3	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
	SI3-SS1	sub slab	12/02/10	0	ND(0.82)	13	ND(0.82)	ND(0.82)	1	ND(0.16)	ND(0.16)	1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI3-SS1	sub slab	4/11/11	0	0.89	ND(1.7)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI3-SS1	sub slab	2/09/12	0	ND(0.84)	55	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI3-SS2	sub slab	3/16/09	0	ND(2.9)	15	ND(2.9)	ND(2.9)	ND(2.9)	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	ND(0.58)	1.8	ND(0.58)
	SI3-SS2	sub slab	6/02/09	0	ND(0.87)	6.1	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	0.7	ND(0.87)	ND(0.17)	ND(0.17)	0.9	ND(0.17)
	SI3-SS2	sub slab	7/02/09	0	ND(0.81)	3.8	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.16)	0.19	ND(0.81)	ND(0.16)	ND(0.16)	0.47	ND(0.16)
	SI3-SS2	sub slab	1/26/10	0	1.9	300 J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI3-SS2	sub slab	9/25/10	0	ND(0.79)	3.2	0.9	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI3-SS2	sub slab	12/02/10	0	ND(0.95)	ND(1.9)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	0.21	ND(0.19)
	SI3-SS2	sub slab	4/11/11	0	ND(2.4)	28	ND(2.4)	ND(2.4)	ND(2.4)	ND(0.48)	ND(0.48)	ND(2.4)	ND(0.48)	ND(0.48)	ND(0.48)	ND(0.48)
	SI3-SS2	sub slab	2/09/12	0	ND(0.79)	3.7 J	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SIOAH3	outdoor air	9/25/10	0	ND(0.85)	ND(1.7)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SIOAH3	outdoor air	12/03/10	0	ND(0.82)	ND(1.6)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SIOAH3	outdoor air	4/12/11	0	ND(0.9)	ND(1.8)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.18)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI3-NS	near slab	3/19/09	6.5	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI3-NS	near slab	3/19/09	11.5	ND(35000)	ND(35000)	ND(35000)	ND(35000)	ND(35000)	ND(7100)	ND(7100)	ND(35000)	ND(7100)	ND(7100)	11000	ND(7100)
	SI3-NS Dup	near slab	3/19/09	11.5	ND(36000)	ND(36000)	ND(36000)	ND(36000)	ND(36000)	ND(7200)	ND(7200)	ND(36000)	ND(7200)	ND(7200)	ND(7200)	ND(7200)
	SI3-NS	near slab	9/24/10	6.5	ND(430)	ND(850)	ND(430)	ND(430)	ND(430)	ND(85)	ND(85)	ND(430)	ND(85)	ND(85)	ND(85)	ND(85)
	SI3-NS	near slab	9/24/10	11.5	ND(40000)	ND(80000)	ND(40000)	ND(40000)	ND(40000)	ND(8000)	ND(8000)	ND(40000)	ND(8000)	ND(8000)	ND(8000)	ND(8000)
	SI3-NS	near slab	12/02/10	6.5	ND(2.2)	ND(4.3)	ND(2.2)	ND(2.2)	ND(2.2)	ND(0.43)	ND(0.43)	ND(2.2)	ND(0.43)	ND(0.43)	ND(0.43)	ND(0.43)
	SI3-NS	near slab	12/02/10	11.5	ND(16000)	ND(32000)	ND(16000)	ND(16000)	ND(16000)	ND(3200)	ND(3200)	ND(16000)	ND(3200)	ND(3200)	ND(3200)	ND(3200)
	SI3-NS	near slab	4/11/11	6.5	ND(2)	ND(4.1)	ND(2)	ND(2)	ND(2)	ND(0.41)	ND(0.41)	ND(2)	ND(0.41)	ND(0.41)	ND(0.41)	ND(0.41)
	SI3-NS	near slab	4/11/11	11.5	ND(28000)	ND(56000)	ND(28000)	ND(28000)	ND(28000)	ND(5600)	ND(5600)	ND(28000)	ND(5600)	ND(5600)	ND(5600)	ND(5600)
	SI3-NS	near slab	2/08/12	6.5	ND(2.1)	ND(4.2)	ND(2.1)	ND(2.1)	ND(2.1)	ND(0.42)	ND(0.42)	ND(2.1)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)
	SI3-NS	near slab	2/08/12	11.5	ND(56000)	ND(110000)	ND(56000)	ND(56000)	ND(56000)	ND(11000)	ND(11000)	ND(56000)	ND(11000)	ND(11000)	ND(11000)	ND(11000)
	SI3-FF	indoor air	1/25/10	0	ND(0.95)	17 J	ND(0.95)	ND(0.95)	2.5	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth	2-Hexanone	Isopropanol	4-Methyl-2-Pentanone	Methylene Chloride	n-Butyl acetate	1,1,2,2-Tetrachloro-ethane	Tetrachloro-ethene	Tetrahydrofuran	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Trichloro-ethene	Vinyl Chloride
				(ft-bgs)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)
SI 04	SI4-IA	indoor air	3/15/09	0	ND(0.82)	32 J	1.5	ND(0.82)	2.5	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI4-IA Dup	indoor air	3/15/09	0	ND(0.86)	35 J	1.7	ND(0.86)	2.7	ND(0.17)	0.22	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	0.2
	SI4-IA	indoor air	1/23/10	0	ND(0.85)	36 J	1.9	ND(0.85)	2.3	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI4-GA	garage air	3/15/09	0	ND(0.86)	15	1.5	ND(0.86)	0.88	0.17	ND(0.17)	1.2	1.4	ND(0.17)	0.22	ND(0.17)
	SI4-GA	garage air	1/23/10	0	ND(0.84)	13	0.92	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI4-SS1	sub slab	3/15/09	0	ND(0.76)	ND(0.76)	1.1	ND(0.76)	ND(0.76)	ND(0.15)	0.2	ND(0.76)	0.31	ND(0.15)	0.43	ND(0.15)
	SI4-SS1	sub slab	1/24/10	0	ND(0.77)	ND(1.5)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	0.24	ND(0.15)	ND(0.15)	ND(0.15)
	SI4-SS2	sub slab	3/15/09	0	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	0.15	ND(0.71)	0.57	ND(0.14)	0.17	ND(0.14)
	SI4-SS2	sub slab	1/24/10	0	ND(0.79)	ND(1.6)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	0.2	ND(0.79)	0.49	ND(0.16)	ND(0.16)	ND(0.16)
SI 06	SI6-IA	indoor air	3/18/09	0	ND(0.87)	12	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	0.24	ND(0.87)	ND(0.17)	ND(0.17)	0.28 J	ND(0.17)
	SI6-IA Dup	indoor air	3/18/09	0	ND(0.85)	12	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	0.32	ND(0.85)	ND(0.17)	ND(0.17)	0.4 J	ND(0.17)
	SI6-SS1	sub slab	3/18/09	0	ND(0.69)	1.7	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	0.35	ND(0.69)	ND(0.14)	ND(0.14)	2.6	ND(0.14)
	SI6-SS2	sub slab	3/18/09	0	ND(0.67)	1.2	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	1.1	ND(0.67)	ND(0.13)	ND(0.13)	0.34	ND(0.13)
SI 07	SI7-IA	indoor air	3/21/09	0	0.89	7.2	ND(0.75)	ND(0.75)	0.89	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI7-IA	indoor air	1/23/10	0	ND(0.97)	ND(1.9)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.19)	1.2	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI7-GA	garage air	3/21/09	0	ND(1)	2.8	ND(1)	ND(1)	1.2	ND(0.21)	ND(0.21)	ND(1)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)
	SI7-GA	garage air	1/23/10	0	ND(0.81)	1.6	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI7-SS1	sub slab	3/22/09	0	ND(0.71)	0.94	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	0.16	ND(0.71)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI7-SS1	sub slab	1/24/10	0	2.7	4.6	2	ND(0.84)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI7-SS2	sub slab	3/22/09	0	ND(0.67)	0.79	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	0.25	ND(0.67)	ND(0.13)	ND(0.13)	0.16	ND(0.13)
	SI7-SS2	sub slab	1/24/10	0	ND(0.75)	77	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	0.46	ND(0.75)	ND(0.15)	ND(0.15)	0.2	ND(0.15)
SI 08	SI8-IA	indoor air	3/17/09	0	ND(0.82)	200	ND(0.82)	1.2	0.99	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI8-IA	indoor air	1/25/10	0	ND(0.75)	4 J	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75) J	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI8-CS	crawlspace	3/17/09	0	ND(0.8)	190	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI8-CS	crawlspace	1/25/10	0	ND(0.97)	ND(1.9) J	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.97) J	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI8-SS1	sub slab	3/17/09	0	0.88 J	5.5	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	0.24	ND(0.71)	0.33	ND(0.14)	ND(0.14)	ND(0.14)
	SI8-SS1	sub slab	1/26/10	0	ND(0.74)	1600 J	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.74) J	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
SI 09	SI9-IA	indoor air	3/21/09	0	ND(0.9)	13	ND(0.9)	ND(0.9)	4.9	ND(0.18)	ND(0.18)	1	1.4	ND(0.18)	ND(0.18)	ND(0.18)
	SI9-IA	indoor air	2/01/10	0	ND(0.82)	87 J	ND(0.82)	ND(0.82)	4.7	ND(0.16)	0.45	1.3	ND(0.16)	ND(0.16)	0.19	ND(0.16)
	SI9-CS	crawlspace	3/21/09	0	ND(0.7)	9.4	ND(0.7)	ND(0.7)	2.7	ND(0.14)	ND(0.14)	1.3	0.44	ND(0.14)	ND(0.14)	ND(0.14)
	SI9-CS	crawlspace	2/01/10	0	ND(0.88)	45 J	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.18)	ND(0.18)	0.89	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI9-DP	deep probe	3/21/09	0	3.6	2.8	0.85	ND(0.77)	ND(0.77)	ND(0.15)	0.45	ND(0.77)	0.94	ND(0.15)	ND(0.15)	ND(0.15)
	SI9-SS1	sub slab	3/21/09	0	1.2	75	0.94	ND(0.66)	ND(0.66)	ND(0.13)	0.43	7.4	1.1	ND(0.13)	ND(0.13)	ND(0.13)
	SI9-SS1	sub slab	1/30/10	0	1.5	120 J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	0.57	3.2	0.58	ND(0.16)	ND(0.16)	ND(0.16)
SI 10	SI10-IA	indoor air	3/17/09	0	ND(0.78)	5.6	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI10-IA	indoor air	12/08/09	0	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI10-CS	crawlspace	3/17/09	0	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI10-CS	crawlspace	2/01/10	0	ND(0.73)	ND(1.5) J	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI10-SS1	sub slab	3/17/09	0	ND(0.72)	30	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	0.24	ND(0.72)	ND(0.14)	ND(0.14)	2.2	ND(0.14)
	SI10-SS1	sub slab	12/07/09	0	ND(11)	25000	ND(11)	ND(11)	ND(11)	ND(2.1)	ND(2.1)	ND(11)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)
	SI10-SS1	sub slab	3/30/10	0	ND(0.86)	ND(1.7)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI10-SS1	sub slab	4/23/10	0	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
	SI10-SS2	sub slab	3/17/09	0	ND(0.94)	18	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.19)	ND(0.19)	ND(0.94)	ND(0.19)	ND(0.19)	1.9	ND(0.19)
	SI10-SS2	sub slab	12/09/09	0	ND(11)	19000	ND(11)	ND(11)	ND(11)	ND(2.3)	ND(2.3)	ND(11)	ND(2.3)	ND(2.3)	ND(2.3)	ND(2.3)
	SI10-SS2	sub slab	3/30/10	0	ND(0.8)	ND(1.6)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI10-SS2	sub slab	4/23/10	0	ND(0.91)	ND(1.8)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	0.34	0.91	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI10-CS1	crawlspace	1/30/10	0	1	2000 J	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	0.54	ND(0.16)
	SI10-NS	near slab	12/09/09	4.3	ND(4.8)	11000	ND(4.8)	ND(4.8)	ND(4.8)	ND(0.96)	ND(0.96)	ND(4.8)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.96)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
SI 10 cont.	SI10-NS	near slab	12/09/09	8.3	ND(38)	68000	ND(38)	ND(38)	ND(38)	ND(7.7)	ND(7.7)	ND(38)	ND(7.7)	ND(7.7)	ND(7.7)	ND(7.7)
	SI10-NS	near slab	1/26/10	8.3	ND(2.4)	1800 J	ND(2.4)	4.5	ND(2.4)	ND(0.47)	ND(0.47)	ND(2.4)	ND(0.47)	ND(0.47)	0.55	0.64
	SI10-NS	near slab	1/26/10	13.3	ND(3)	160 J	ND(3)	ND(3)	ND(3)	ND(0.6)	ND(0.6)	ND(3)	ND(0.6)	ND(0.6)	3.7	ND(0.6)
	SI10-NS	near slab	1/27/10	4.3	ND(2.8)	13 J	ND(2.8)	ND(2.8)	ND(2.8)	ND(0.55)	ND(0.55)	ND(2.8)	ND(0.55)	ND(0.55)	ND(0.55)	ND(0.55)
	SI10-NS	near slab	3/29/10	4.3	ND(2.7)	ND(5.4)	ND(2.7)	ND(2.7)	3	ND(0.54)	ND(0.54)	ND(2.7)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)
	SI10-NS	near slab	3/29/10	8.3	ND(2.7)	ND(5.4)	ND(2.7)	ND(2.7)	ND(2.7)	ND(0.54)	ND(0.54)	ND(2.7)	ND(0.54)	ND(0.54)	ND(0.54)	ND(0.54)
	SI10-NS	near slab	3/29/10	13.3	ND(2.9)	ND(5.8)	ND(2.9)	ND(2.9)	ND(29)	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	ND(0.58)	ND(0.58)	ND(0.58)
	SI10-NS	near slab	4/23/10	4.3	ND(2.3)	ND(4.6)	ND(2.3)	ND(2.3)	ND(2.3)	ND(0.46)	ND(0.46)	ND(2.3)	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)
	SI10-NS	near slab	4/23/10	8.3	ND(3)	ND(6)	ND(3)	ND(3)	ND(3)	ND(0.6)	ND(0.6)	ND(3)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)
	SI10-NS	near slab	4/23/10	13.3	ND(2.1)	ND(4.2)	ND(2.1)	ND(2.1)	ND(2.1)	ND(0.42)	ND(0.42)	ND(2.1)	ND(0.42)	ND(0.42)	ND(0.42)	ND(0.42)
	SI10-OA	outdoor air	12/08/09	0	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI10-SS3	sub slab	1/26/10	0	ND(0.79)	24	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI10-SS3	sub slab	4/23/10	0	ND(1)	ND(2.1)	ND(1)	ND(1)	ND(1)	ND(0.21)	ND(0.21)	ND(1)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)
	SI10-SS4	sub slab	1/26/10	0	ND(0.74)	3	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
SI 12	SI12-IA	indoor air	3/14/09	0	ND(1.1)	29	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.21)	ND(0.21)	ND(1.1)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)
	SI12-IA	indoor air	1/27/10	0	0.8	4.3	1.2	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	0.99	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI12-CS	crawlspace	3/14/09	0	ND(0.79)	1.5	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI12-CS	crawlspace	1/27/10	0	ND(0.74)	ND(1.5)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
SI 13	SI13-IA	indoor air	3/18/09	0	ND(2.2)	57	2.5	ND(2.2)	25	ND(0.45)	ND(0.45)	93	ND(0.45)	ND(0.45)	ND(0.45)	ND(0.45)
	SI13-IA	indoor air	1/24/10	0	ND(0.92)	40	0.92	ND(0.92)	5.7	ND(0.18)	ND(0.18)	2.8	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI13-GA	garage air	3/18/09	0	ND(0.93)	7.6	1.5	ND(0.93)	6.6	ND(0.19)	ND(0.19)	1.6 J	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI13-GA	garage air	1/24/10	0	ND(0.86)	18	1.8	ND(0.86)	2.7	ND(0.17)	ND(0.17)	5.1	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI13-SS1	sub slab	3/18/09	0	2.3 J	6.7 J	1.2	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	6.6	ND(0.15)	ND(0.15)	0.16	ND(0.15)
	SI13-SS1	sub slab	1/25/10	0	ND(0.82)	ND(1.6)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	1.1	ND(0.82)	ND(0.16)	ND(0.16)	0.49	ND(0.16)
	SI13-SS2	sub slab	3/18/09	0	1.1 J	7.2	1	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.14)	4.6	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI13-SS2	sub slab	1/25/10	0	0.81	ND(1.6) J	0.9	ND(0.8)	ND(0.8)	ND(0.16)	0.35 J	1.8	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI13-SS2 Dup	sub slab	1/25/10	0	1.1	6.7 J	0.99	ND(0.81)	ND(0.81)	ND(0.16)	0.25 J	1.8	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
SI 14	SI14-IA	indoor air	3/16/09	0	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.91)	0.92	ND(0.18)	ND(0.18)	ND(0.18)
	SI14-SS1	sub slab	3/16/09	0	ND(0.67)	2	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	0.14	ND(0.67)	0.18	ND(0.13)	ND(0.13)	ND(0.13)
	SI14-SS2	sub slab	3/16/09	0	ND(0.75)	4.2	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	0.18	ND(0.75)	0.71	ND(0.15)	1.4	ND(0.15)
SI 23	SI23-IA	indoor air	3/17/09	0	ND(0.74)	6.9	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI23-IA	indoor air	1/27/10	0	ND(0.99)	2.3	ND(0.99)	ND(0.99)	ND(0.99)	ND(0.2)	ND(0.2)	ND(0.99)	ND(0.2)	ND(0.2)	ND(0.2) J	ND(0.2)
	SI23-GA	garage air	3/17/09	0	ND(0.64)	1.3	0.83 J	ND(0.64)	ND(0.64)	ND(0.13)	0.2	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI23-GA	garage air	1/27/10	0	ND(0.79)	ND(1.6)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16) J	ND(0.16)
	SI23-CS	crawlspace	3/17/09	0	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI23-CS	crawlspace	1/27/10	0	ND(0.85)	ND(1.7)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	1.5	ND(0.17)	ND(0.17)	ND(0.17) J	ND(0.17)
	SI23-DP	deep probe	3/17/09	0	ND(0.98)	8.9	2.2	ND(0.98)	ND(0.98)	ND(0.2)	0.27	2.9	ND(0.2)	ND(0.2)	0.32	ND(0.2)
	SI23-DP	deep probe	1/28/10	0	1.4	3.8	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	ND(0.13)	0.67	ND(0.13)	ND(0.13)	ND(0.13) J	ND(0.13)
	SI23-SS1	sub slab	3/17/09	0	ND(0.72)	0.73	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	0.21	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI23-SS1 Dup	sub slab	3/17/09	0	ND(0.72)	0.98	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	0.26	ND(0.14)
SI 24	SI24-IA	indoor air	3/21/09	0	ND(0.77)	0.77	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI24-IA	indoor air	1/29/10	0	ND(0.56)	ND(1.1) J	ND(0.56)	0.76	ND(0.56)	ND(0.11)	0.36	ND(0.56)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)
	SI24-IA Dup	indoor air	1/29/10	0	ND(0.84)	1.9 J	ND(0.84)	0.91	ND(0.84)	ND(0.17)	0.36	0.89	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI24-SS1	sub slab	3/22/09	0	0.73	0.77	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	0.47 J	ND(0.64)	ND(0.13)	ND(0.13)	19 J	ND(0.13)
	SI24-SS1 Dup	sub slab	3/22/09	0	ND(0.65)	0.85	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.13)	0.78 J	ND(0.65)	ND(0.13)	ND(0.13)	10 J	ND(0.13)
	SI24-SS1	sub slab	1/30/10	0	ND(0.68)	50 J	ND(0.68)	ND(0.68)	ND(0.68)	ND(0.14)	0.28	ND(0.68)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI24-SS2	sub slab	3/22/09	0	ND(0.66)	2	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.13)	0.27	ND(0.66)	ND(0.13)	ND(0.13)	0.74	ND(0.13)
	SI24-SS2	sub slab	1/30/10	0	1.1	7.6 J	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	0.26	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
SI 25	SI25-IA	indoor air	3/14/09	0	ND(0.82)	5.4	ND(0.82)	4.2	1.6	ND(0.16)	0.41	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI25-IA	indoor air	1/24/10	0	ND(0.82)	5.4	ND(0.82)	7.4	0.83	ND(0.16)	0.56	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI25-IA Dup	indoor air	1/24/10	0	1.1	4.9	ND(0.85)	7.8	1	ND(0.17)	0.6	1.4	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI25-GA	garage air	3/14/09	0	ND(0.89)	3.3	ND(0.89)	34	ND(0.89)	ND(0.18)	3.5	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI25-GA	garage air	1/24/10	0	ND(0.79)	3.4	ND(0.79)	52	ND(0.79)	ND(0.16)	3.7	3.3	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI25-CS	crawlspace	3/14/09	0	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI25-CS	crawlspace	1/24/10	0	ND(0.78)	ND(1.6)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI25-SS1	sub slab	3/14/09	0	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(5.6)	15 J	ND(5.6)
	SI25-SS1 Dup	sub slab	3/14/09	0	ND(28)	ND(28)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(5.6)	11 J	ND(5.6)
	SI25-SS1	sub slab	1/26/10	0	1.7 J	2.9 J	1.4	ND(0.77)	ND(0.77)	ND(0.15)	0.39	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI25-SS1 Dup	sub slab	1/26/10	0	ND(0.77) J	ND(1.5)	1.2	ND(0.77)	ND(0.77)	ND(0.15)	0.38	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
SI 26	SI26-IA	indoor air	3/14/09	0	ND(0.78)	13	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI26-CS	crawlspace	3/14/09	0	ND(0.91)	3	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
SI 27	SI27-IA	indoor air	3/15/09	0	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	0.31	ND(0.86)	ND(0.17)	ND(0.17)	0.21	ND(0.17)
	SI27-CS	crawlspace	3/15/09	0	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
SI 28	SI28-FFA	indoor air	3/20/09	0	ND(0.79)	150	ND(0.79)	ND(0.79)	7.1	ND(0.16)	0.19	6.9	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI28-IA	indoor air	3/20/09	0	ND(0.78)	39	ND(0.78)	ND(0.78)	1.4	ND(0.16)	ND(0.16)	11	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI28-IA	indoor air	1/27/10	0	ND(0.77)	45 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	6.5	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI28-GA	garage air	3/20/09	0	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI28-GA	garage air	1/27/10	0	ND(0.76)	ND(1.5)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI28-SS1	sub slab	3/20/09	0	ND(0.73)	17	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	0.24	1	ND(0.15)	ND(0.15)	2.8	ND(0.15)
	SI28-SS1	sub slab	1/28/10	0	2.3 J	ND(1.6)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI28-SS1 Dup	sub slab	1/28/10	0	ND(0.79) J	ND(1.6)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	0.23	1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI28-SS2	sub slab	3/20/09	0	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	0.26	1.2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI28-SS2	sub slab	1/28/10	0	1.1	ND(1.5)	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI28-NS	near slab	3/20/09	15	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	0.22	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI28-NS	near slab	3/20/09	25	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	0.55	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI28-NS	near slab	3/21/09	5	1.7	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.15)	0.25	ND(0.74)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI28-NS	near slab	3/21/09	10	ND(0.92)	3.5	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.18)	0.84	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI28-NS	near slab	3/21/09	20	ND(1.4)	5	ND(1.4)	ND(1.4)	ND(1.4)	ND(0.29)	1.9	2.1	0.29	ND(0.29)	ND(0.29)	ND(0.29)
	SI28-FF	indoor air	1/27/10	0	ND(1.1)	40 J	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.21)	ND(0.21)	5.4	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)
SI 29	SI29-IA	indoor air	3/15/09	0	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI29-IA	indoor air	1/25/10	0	ND(0.77)	1.8 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.54	ND(0.15)
	SI29-CS	crawlspace	3/15/09	0	ND(0.73)	1.3	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI29-CS	crawlspace	1/25/10	0	ND(0.92)	ND(1.8)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
SI 30	SI30-IA	indoor air	3/16/09	0	ND(0.84)	0.94	ND(0.84)	24	ND(0.84)	ND(0.17)	ND(0.17)	1.2	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI30-IA Dup	indoor air	3/16/09	0	ND(0.9)	ND(0.9)	ND(0.9)	24	ND(0.9)	ND(0.18)	ND(0.18)	1.1	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI30-IA	indoor air	1/23/10	0	ND(0.91)	ND(1.8)	ND(0.91)	14	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI30-SS1	sub slab	3/16/09	0	0.76	1.9	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	0.5	ND(0.69)	2.1	ND(0.14)	5.4	ND(0.14)
	SI30-SS2	sub slab	3/16/09	0	0.7	1.4	ND(0.68)	0.71	ND(0.68)	ND(0.14)	0.98	ND(0.68)	0.19	ND(0.14)	0.36	ND(0.14)
	SI30-SS2 Dup	sub slab	3/16/09	0	ND(0.69)	1.4	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	0.77	ND(0.69)	0.17	ND(0.14)	0.36	ND(0.14)
SI 31	SI31-IA	indoor air	3/14/09	0	ND(0.97)	150	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI31-IA	indoor air	1/28/10	0	ND(0.95)	35	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.19) J	ND(0.19)
	SI31-CS	crawlspace	3/14/09	0	ND(0.85)	200	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI31-CS	crawlspace	1/28/10	0	ND(0.93)	11	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.19)	ND(0.19)	0.96	ND(0.19)	ND(0.19)	ND(0.19) J	ND(0.19)
	SI31-SS1	sub slab	3/14/09	0	0.95	2.6	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	0.23	ND(0.75)	ND(0.15)	ND(0.15)	2.8	ND(0.15)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
SI 31 cont.	SI31-SS1	sub slab	1/29/10	0	1.7	ND(1.7)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	1.3 J	ND(0.17)
	SI31-SS1 Dup	sub slab	1/29/10	0	1.4	ND(1.7)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	0.35 J	ND(0.17)
	SI31-SS2	sub slab	3/14/09	0	ND(0.72)	1.1	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	0.47	ND(0.72)	3.3	ND(0.14)	0.61	ND(0.14)
	SI31-SS2	sub slab	1/29/10	0	1.5	7.6	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	0.39	0.99	3.8	ND(0.16)	ND(0.16) J	ND(0.16)
SI 32	SI32-IA	indoor air	3/18/09	0	ND(2.6)	5.2	ND(2.6)	ND(2.6)	ND(2.6)	ND(0.52)	ND(0.52)	ND(2.6)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
	SI32-IA	indoor air	1/27/10	0	ND(0.95)	8.5	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.19) J	ND(0.19)
	SI32-CS	crawlspace	3/18/09	0	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.22)	ND(0.22)	ND(1.1)	ND(0.22)	ND(0.22)	ND(0.22)	ND(0.22)
	SI32-CS	crawlspace	1/27/10	0	ND(0.87)	ND(1.7)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17) J	ND(0.17)
	SI32-DP	deep probe	3/18/09	0	ND(0.71)	60 J	0.77	ND(0.71)	ND(0.71)	ND(0.14)	0.16 J	1	ND(0.14) J	ND(0.14)	2.3 J	ND(0.14)
	SI32-DP Dup	deep probe	3/18/09	0	ND(0.71)	26 J	0.81	ND(0.71)	ND(0.71)	ND(0.14)	0.76 J	1.1	0.36 J	ND(0.14)	0.88 J	ND(0.14)
	SI32-DP	deep probe	1/28/10	0	ND(1.5)	4400 J	ND(1.5)	ND(1.5)	ND(1.5)	ND(0.3)	0.44	1.9	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)
	SI32-DP Dup	deep probe	1/28/10	0	ND(0.91)	3400 J	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	0.41	1.8	ND(0.18)	ND(0.18)	0.25	ND(0.18)
SI 33	SI33-IA	indoor air	3/15/09	0	ND(0.87)	7.6	ND(0.87)	ND(0.87)	1.6	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI33-IA	indoor air	1/23/10	0	ND(0.67)	4.4	ND(0.67)	ND(0.67)	1.7	ND(0.13)	ND(0.13)	1.2	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI33-CS	crawlspace	3/15/09	0	ND(0.87)	2.6	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI33-CS	crawlspace	1/23/10	0	ND(0.93)	ND(1.9)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI33-GA	garage air	1/23/10	0	ND(0.87)	2.3	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
SI 34	SI34-IA	indoor air	3/14/09	0	ND(0.96)	26	ND(0.96)	5.2	3.2	ND(0.19)	0.58	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI34-CS	crawlspace	3/14/09	0	0.82	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI34-CS Dup	crawlspace	3/14/09	0	ND(0.64)	1	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI34-DP	deep probe	3/14/09	0	ND(0.82)	4.3	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	0.36	ND(0.82)	0.22	ND(0.16)	0.22	ND(0.16)
SI 35	SI35-IA	indoor air	3/15/09	0	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	9.4	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI35-IA	indoor air	1/26/10	0	ND(0.81)	ND(1.6) J	ND(0.81)	ND(0.81)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.81)	0.58	ND(0.16)	ND(0.16)	ND(0.16)
	SI35-GA	garage air	3/15/09	0	ND(0.8)	0.88	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI35-GA	garage air	1/26/10	0	ND(0.75)	ND(1.5) J	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI35-SS1	sub slab	3/15/09	0	ND(0.66)	2.7	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.13)	0.25	ND(0.66)	0.56	ND(0.13)	0.32	ND(0.13)
	SI35-SS1	sub slab	1/27/10	0	3.6	2100	ND(1.2)	ND(1.2)	ND(1.2)	ND(0.24)	ND(0.24)	ND(1.2)	0.42	ND(0.24)	ND(0.24)	ND(0.24)
	SI35-SS2	sub slab	3/15/09	0	ND(0.7)	0.83	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	0.14	ND(0.7)	0.19	ND(0.14)	0.25	ND(0.14)
	SI35-SS2	sub slab	1/27/10	0	ND(0.77)	ND(1.5)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	1.1	0.16	ND(0.15)	ND(0.15)	ND(0.15)
SI 36	SI36-IA	indoor air	3/17/09	0	ND(0.93)	260	ND(0.93)	ND(0.93)	8.7	ND(0.19)	0.23	ND(0.93)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI36-IA	indoor air	1/26/10	0	ND(0.94)	28 J	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.19)	ND(0.19)	1	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI36-CS	crawlspace	3/17/09	0	ND(0.72)	13 J	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI36-CS	crawlspace	1/26/10	0	ND(0.65)	ND(1.3)	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
SI 37	SI37-IA	indoor air	3/17/09	0	ND(0.82)	2.4	ND(0.82)	ND(0.82)	3.1	ND(0.16)	ND(0.16)	19	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI37-IA	indoor air	1/26/10	0	ND(0.86)	ND(1.7)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	4.8	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI37-SS1	sub slab	3/17/09	0	2.9 J	20	ND(0.65)	ND(0.65)	1.6	ND(0.13)	0.13	1	ND(0.13)	ND(0.13)	0.14	ND(0.13)
	SI37-SS1	sub slab	1/27/10	0	ND(1.5)	9400 J	ND(1.5)	ND(1.5)	ND(1.5)	ND(0.31)	ND(0.31)	ND(1.5)	ND(0.31)	ND(0.31)	ND(0.31)	ND(0.31)
	SI37-SS1 Dup	sub slab	1/27/10	0	ND(0.79)	4800 J	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	0.91	ND(0.16)	ND(0.16)	0.17	ND(0.16)
	SI37-SS2	sub slab	3/17/09	0	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	0.54	ND(0.7)	ND(0.14)	ND(0.14)	0.38	ND(0.14)
SI 38	SI38-IA	indoor air	3/17/09	0	1.7 J	9 J	0.99 J	ND(0.92)	9.7	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI38-IA	indoor air	1/25/10	0	ND(0.85)	13 J	ND(0.85)	ND(0.85)	2.2	ND(0.17)	ND(0.17)	ND(0.85) J	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI38-CS	crawlspace	3/17/09	0	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI38-CS Dup	crawlspace	3/17/09	0	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI38-CS	crawlspace	1/25/10	0	ND(0.89)	7.5 J	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.89) J	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
SI 39	SI39-IA	indoor air	3/19/09	0	ND(0.85)	11	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85) J	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI39-IA Dup	indoor air	3/19/09	0	ND(0.9)	11	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.18)	ND(0.18)	ND(0.9) J	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI39-IA	indoor air	1/24/10	0	ND(0.83)	14	ND(0.83)	1	ND(0.83)	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI39-SS1	sub slab	3/19/09	0	1.8	10	1.1	ND(0.75)	ND(0.75)	ND(0.15)	0.22	ND(0.75)	0.27	ND(0.15)	0.29	ND(0.15)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
SI 39 cont.	SI39-SS1	sub slab	1/25/10	0	0.83	2.5	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	0.16	ND(0.15)	ND(0.15)	ND(0.15)
	SI39-SS2	sub slab	3/19/09	0	2.2	2.6	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	0.26	ND(0.75)	0.27	ND(0.15)	0.23	ND(0.15)
	SI39-SS2	sub slab	1/25/10	0	ND(0.83)	ND(1.7)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.17)	6.2	ND(0.83)	0.4	ND(0.17)	0.37	ND(0.17)
SI 40	SI40-IA1	indoor air	3/21/09	0	ND(0.93)	10	1	ND(0.93)	ND(0.93)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI40-IA1	indoor air	2/01/10	0	ND(0.9)	21	2.8	ND(0.9)	ND(0.9)	ND(0.18)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI40-IA2	indoor air	3/21/09	0	ND(0.79)	41	2.1	2.1	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI40-IA2	indoor air	2/01/10	0	ND(0.85)	44	13	ND(0.85)	5.8	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI40-IA3	indoor air	3/21/09	0	ND(0.8)	53	2.2	ND(0.8)	1.1	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI40-IA3	indoor air	2/01/10	0	ND(0.71)	8.2	1.2	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI40-CS1	crawlspace	3/21/09	0	ND(0.87)	3.9	1	2.1	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI40-CS1 Dup	crawlspace	3/21/09	0	ND(0.82)	4.4	1.2	2.5	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	0.29	ND(0.16)
	SI40-CS1	crawlspace	2/01/10	0	ND(0.96)	21	12	0.96	2.9	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI40-CS1 Dup	crawlspace	2/01/10	0	ND(0.97)	20	12	ND(0.97)	3.5	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI40-CS2	crawlspace	3/21/09	0	ND(0.85)	11	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI40-CS2	crawlspace	2/01/10	0	ND(0.92)	4.7	1.2	ND(0.92)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI40-SS1	sub slab	3/21/09	0	ND(0.8)	6	2.5	ND(0.8)	ND(0.8)	ND(0.16)	0.35	ND(0.8)	ND(0.16)	ND(0.16)	0.23	ND(0.16)
	SI40-SS1	sub slab	1/30/10	0	ND(1.7)	4900 J	ND(1.7)	ND(1.7)	ND(1.7)	ND(0.35)	0.51	ND(1.7)	ND(0.35)	ND(0.35)	0.5	ND(0.35)
	SI40-SS1 Dup	sub slab	1/30/10	0	1.1	1300 J	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	0.52	ND(0.87)	ND(0.17)	ND(0.17)	0.22	ND(0.17)
SI 41	SI41-IA1	indoor air	3/21/09	0	ND(0.8)	8.5 J	1.9	1	1.2	ND(0.16)	0.26	ND(0.8)	ND(0.16)	ND(0.16)	0.18	ND(0.16)
	SI41-IA1 Dup	indoor air	3/21/09	0	ND(0.79)	11 J	2	1.2	1.1	ND(0.16)	0.25	ND(0.79)	ND(0.16)	ND(0.16)	0.24	ND(0.16)
	SI41-IA2	indoor air	3/21/09	0	ND(0.77)	14	1.6	4.2	ND(0.77)	ND(0.15)	0.51	ND(0.77)	0.24	ND(0.15)	0.72	ND(0.15)
	SI41-CS1	crawlspace	3/21/09	0	ND(0.86)	2.1	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI41-SS1	sub slab	3/21/09	0	ND(0.73)	1.3 J	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	0.85	ND(0.73)	ND(0.15)	ND(0.15)	0.68 J	ND(0.15)
	SI41-SS1 Dup	sub slab	3/21/09	0	ND(0.73)	1.5 J	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	0.98	ND(0.73)	ND(0.15)	ND(0.15)	1.3 J	ND(0.15)
SI 42	SI42-IA	indoor air	3/16/09	0	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.18)	ND(0.18)	1.4	0.4	ND(0.18)	ND(0.18)	ND(0.18)
	SI42-IA	indoor air	1/26/10	0	ND(0.73)	2.3	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	ND(0.15)	0.75	0.19	ND(0.15)	ND(0.15)	ND(0.15)
	SI42-CS	crawlspace	3/16/09	0	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.17)	ND(0.17)	0.83	0.17	ND(0.17)	ND(0.17)	ND(0.17)
	SI42-CS Dup	crawlspace	3/16/09	0	ND(1.2)	ND(1.2)	ND(1.2)	ND(1.2)	ND(1.2)	ND(0.25)	ND(0.25)	ND(1.2)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
	SI42-CS	crawlspace	1/26/10	0	ND(0.83)	ND(1.7)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI42-SS1	sub slab	3/16/09	0	0.77 J	1.5	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	0.19	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI42-SS1	sub slab	1/27/10	0	0.95 J	6.4 J	1.2	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	1.1	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI42-SS1 Dup	sub slab	1/27/10	0	1.5 J	560 J	1.2	ND(0.71)	ND(0.71)	ND(0.14)	ND(0.14)	1.1	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
SI 44	SI44-IA	indoor air	3/20/09	0	ND(0.86)	4.9	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI44-IA Dup	indoor air	3/20/09	0	ND(0.72)	5.4	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)
	SI44-IA	indoor air	1/24/10	0	ND(0.97)	17	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI44-SS1	sub slab	3/20/09	0	0.74	3.8	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI44-SS1	sub slab	1/25/10	0	ND(0.77)	2.2 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI44-SS1 Dup	sub slab	1/25/10	0	0.85	5.1 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI44-SS2	sub slab	3/20/09	0	ND(0.69)	13	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	0.29	ND(0.69)	0.14	ND(0.14)	1.4	ND(0.14)
	SI44-SS2	sub slab	1/25/10	0	ND(0.7)	1.8	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.14)	0.56	ND(0.14)
SI 45	SI45-IA	indoor air	3/19/09	0	ND(0.88)	5.4	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.18)	ND(0.18)	ND(0.88) J	ND(0.18)	ND(0.18)	0.38	ND(0.18)
	SI45-IA	indoor air	1/23/10	0	ND(1.5)	ND(2.9)	ND(1.5)	ND(1.5)	ND(1.5)	ND(0.29)	ND(0.29)	ND(1.5)	ND(0.29)	ND(0.29)	ND(0.29)	ND(0.29)
	SI45-GA	garage air	3/19/09	0	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	ND(0.19)	ND(0.95) J	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)
	SI45-CS	crawlspace	3/19/09	0	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.8) J	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI45-CS	crawlspace	1/23/10	0	ND(0.92)	ND(1.8)	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
	SI45-DP	deep probe	1/24/10	0	0.99	ND(1.6)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	0.45	1.4	ND(0.16)	ND(0.16)	0.3	ND(0.16)

TABLE 6.2-2. SUMMARY OF SOLVENT RELATED VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	2-Hexanone (ug/m³)	Isopropanol (ug/m³)	4-Methyl-2-Pentanone (ug/m³)	Methylene Chloride (ug/m³)	n-Butyl acetate (ug/m³)	1,1,2,2-Tetrachloro-ethane (ug/m³)	Tetrachloro-ethene (ug/m³)	Tetrahydrofuran (ug/m³)	1,1,1-Trichloro-ethane (ug/m³)	1,1,2-Trichloro-ethane (ug/m³)	Trichloro-ethene (ug/m³)	Vinyl Chloride (ug/m³)
SI 46	SI46-IA	indoor air	3/19/09	0	ND(0.85)	12	1.1	ND(0.85)	1.7	ND(0.17)	1.1	ND(0.85) J	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI46-IA	indoor air	1/28/10	0	ND(0.93)	ND(1.9)	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.19)	ND(0.19)	5.1	ND(0.19)	ND(0.19)	ND(0.19) J	ND(0.19)
	SI46-SS1	sub slab	3/19/09	0	1.9	31	2.6	ND(0.76)	ND(0.76)	ND(0.15)	4	ND(0.76)	0.28	ND(0.15)	2.4	ND(0.15)
	SI46-SS1	sub slab	1/29/10	0	1.7	26 J	3.5	ND(0.77)	1.2	ND(0.15)	0.6	3.4	0.23	ND(0.15)	4.7 J	ND(0.15)
	SI46-SS1 Dup	sub slab	1/29/10	0	1.6	16 J	3.3	ND(0.77)	1.1	ND(0.15)	0.51	3.5	0.24	ND(0.15)	0.17 J	ND(0.15)
	SI46-SS2	sub slab	3/19/09	0	0.72	26	1.8	ND(0.7)	0.87	ND(0.14)	1.9	ND(0.7)	ND(0.14)	ND(0.14)	1.5	ND(0.14)
	SI46-SS2	sub slab	1/29/10	0	ND(0.79)	2.6	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	0.48	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16) J	ND(0.16)
SI 47	SI47-IA	indoor air	3/19/09	0	ND(0.82)	48	ND(0.82)	1.1	ND(0.82)	ND(0.16)	ND(0.16)	0.92 J	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI47-IA	indoor air	1/28/10	0	ND(0.7)	2	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	ND(0.14)	0.82	ND(0.14)	ND(0.14)	ND(0.14) J	ND(0.14)
	SI47-GA	garage air	3/19/09	0	ND(0.81)	14	4.8	1.8	1.6	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	0.61	ND(0.16)
	SI47-GA	garage air	1/28/10	0	ND(0.79)	ND(1.6)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16) J	ND(0.16)
	SI47-CS	crawlspace	3/19/09	0	ND(0.84)	47	ND(0.84)	0.98	ND(0.84)	ND(0.17)	ND(0.17)	0.97 J	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI47-CS	crawlspace	1/28/10	0	ND(0.69)	ND(1.4)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.14)	ND(0.14) J	ND(0.14)
	SI47-SS1	sub slab	3/19/09	0	0.74	2.9	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	2.1	ND(0.72)	4.2	ND(0.14)	ND(0.14)	ND(0.14)
	SI47-SS1	sub slab	1/29/10	0	ND(0.76)	58	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	1.1	0.79	5.5	ND(0.15)	0.44 J	ND(0.15)
SI 49	SI49-IA	indoor air	3/21/09	0	ND(0.81)	18	ND(0.81)	4.2	48	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI49-IA	indoor air	1/27/10	0	ND(0.77)	6.8	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI49-CS	crawlspace	3/21/09	0	ND(0.77)	3.7	ND(0.77)	1.9	3.9	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI49-CS	crawlspace	1/27/10	0	ND(0.87)	3.9	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
SI 50	SI50-IA	indoor air	3/21/09	0	ND(0.77)	410	ND(0.77)	ND(0.77)	3	ND(0.15)	ND(0.15)	2.8	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)
	SI50-IA	indoor air	1/29/10	0	ND(0.83)	99 J	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.17)	ND(0.17)	1.4	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)
	SI50-SS1	sub slab	3/21/09	0	0.75	12 J	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	0.28	ND(0.72)	ND(0.14)	ND(0.14)	0.25	ND(0.14)
	SI50-SS1	sub slab	1/29/10	0	ND(0.82)	130 J	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	0.17	0.92	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.16)
	SI50-SS2	sub slab	3/21/09	0	ND(0.66)	5 J	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)
	SI50-SS2	sub slab	1/29/10	0	ND(3.7)	7400 J	ND(3.7)	ND(3.7)	ND(3.7)	ND(0.74)	ND(0.74)	ND(3.7)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)

Notes:
J - Value is estimated
R - Value has been rejected and should not be used
ug/m^3 - micrograms per cubic meter
ft-bgs - feet below ground surface
ND - constituent not detected above reporting limit
Dup - duplicate sample

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth	Acrolein	Allyl Chloride	Benzyl-chloride	Bromo-dichloro-methane	Bromoform	Bromo-methane	Carbon Disulfide	Chloroethane	Chloroform	Chloromethane	1,2-Dibromo 3-chloro-propane	Dibromo-chloromethane	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane
				(ft-bgs)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)
Outdoor Air	OA1	outdoor air	3/14/09	0	0.65	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	0.56 J	ND(0.64)	ND(0.13)	ND(0.64)
	OA1	outdoor air	3/15/09	0	ND(0.84)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	0.52	ND(0.84)	ND(0.17)	ND(0.84)
	OA1	outdoor air	3/16/09	0	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	0.53	ND(0.89)	ND(0.18)	ND(0.89)
	OA1	outdoor air	3/17/09	0	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	0.6	ND(0.75)	ND(0.15)	ND(0.75)
	OA1	outdoor air	3/18/09	0	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	0.55	ND(0.73)	ND(0.15)	ND(0.73)
	OA1	outdoor air	3/19/09	0	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	0.55	ND(0.78)	ND(0.16)	ND(0.78)
	OA1	outdoor air	3/20/09	0	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	0.45 J	ND(0.97)	ND(0.19)	ND(0.97)
	OA1	outdoor air	3/21/09	0	1.5	ND(0.21)	ND(0.21)	ND(0.21)	ND(1.1)	ND(0.21)	ND(1.1)	ND(0.21)	ND(0.21)	0.45 J	ND(1.1)	ND(0.21)	ND(1.1)
	OA1	outdoor air	6/03/09	0	ND(0.82) J	ND(0.16)	ND(0.16) J	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	0.53	ND(0.82)	ND(0.16)	ND(0.82)
	OA1	outdoor air	7/02/09	0	1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	0.55	ND(0.81)	ND(0.16)	ND(0.81)
	OA2	outdoor air	3/14/09	0	ND(1.1)	ND(0.22)	ND(0.22)	ND(0.22)	ND(1.1)	ND(0.22)	ND(1.1)	ND(0.22)	ND(0.22)	0.53 J	ND(1.1)	ND(0.22)	ND(1.1)
	OA2	outdoor air	3/15/09	0	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	0.52	ND(0.75)	ND(0.15)	ND(0.75)
	OA2	outdoor air	3/16/09	0	ND(0.96)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.19)	0.5	ND(0.96)	ND(0.19)	ND(0.96)
	OA2	outdoor air	3/17/09	0	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.62	ND(0.77)	ND(0.15)	ND(0.77)
	OA2	outdoor air	3/18/09	0	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	0.62	ND(0.82)	ND(0.16)	ND(0.82)
	OA2	outdoor air	3/19/09	0	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.53	ND(0.77)	ND(0.15)	ND(0.77)
	OA2	outdoor air	3/20/09	0	7.3	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	0.48 J	ND(0.95)	ND(0.19)	ND(0.95)
	OA2	outdoor air	3/21/09	0	1.4	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.14)	0.48 J	ND(0.7)	ND(0.14)	ND(0.7)
	OA3	outdoor air	3/14/09	0	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	0.53 J	ND(0.78)	ND(0.16)	ND(0.78)
	OA3	outdoor air	3/15/09	0	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	0.52	ND(0.79)	ND(0.16)	ND(0.79)
	OA3	outdoor air	3/16/09	0	ND(0.97)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	0.58	ND(0.97)	ND(0.19)	ND(0.97)
	OA3	outdoor air	3/17/09	0	0.91	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	0.55	ND(0.87)	ND(0.17)	ND(0.87)
	OA3	outdoor air	3/18/09	0	3	ND(0.14)	ND(0.14) J	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.14)	0.69	ND(0.69)	ND(0.14)	ND(0.69)
	OA3	outdoor air	3/19/09	0	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	0.56	ND(0.85)	ND(0.17)	ND(0.85)
	OA3	outdoor air	3/20/09	0	5.2	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.19)	0.44 J	ND(0.96)	ND(0.19)	ND(0.96)
	OA3	outdoor air	3/21/09	0	1.3	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	0.48 J	ND(0.78)	ND(0.16)	ND(0.78)
	OA4	outdoor air	1/23/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	0.49	ND(0.77)	ND(0.15)	ND(0.77)
	OA4	outdoor air	1/24/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	0.55	ND(0.79)	ND(0.16)	ND(0.79)
	OA4	outdoor air	1/25/10	0	ND(2.4)	ND(0.12)	ND(0.6)	ND(0.12)	ND(0.6)	ND(0.12)	ND(6)	ND(0.12)	ND(0.12)	0.57	ND(0.6)	ND(0.12)	ND(0.6)
	OA4	outdoor air	1/26/10	0	3.1	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	ND(7.2)	ND(0.14)	ND(0.14)	0.57	ND(0.72)	ND(0.14)	ND(0.72)
	OA4	outdoor air	1/27/10	0	ND(3)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(7.5)	ND(0.15)	ND(0.15)	0.54	ND(0.75)	ND(0.15)	ND(0.75)
	OA4	outdoor air	1/28/10	0	ND(3.6)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(8.9)	ND(0.18)	ND(0.18)	0.52	ND(0.89)	ND(0.18)	ND(0.89)
	OA4	outdoor air	1/29/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	OA4	outdoor air	1/30/10	0	ND(2.8)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	ND(7)	ND(0.14)	ND(0.14)	0.81	ND(0.7)	ND(0.14)	ND(0.7)
	OA4	outdoor air	2/01/10	0	ND(3.5)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(8.9)	ND(0.18)	ND(0.18)	ND(0.35)	ND(0.89)	ND(0.18)	ND(0.89)
SI 01	SI1-IA	indoor air	3/18/09	0	3.1	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	0.76	ND(0.85)	ND(0.17)	ND(0.85)
	SI1-IA	indoor air	1/28/10	0	4.4	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(8.9)	ND(0.18)	ND(0.18)	0.99	ND(0.89)	ND(0.18)	ND(0.89)
	SI1-GA	garage air	3/18/09	0	1.3	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.61	ND(0.77)	ND(0.15)	ND(0.77)
	SI1-GA	garage air	1/28/10	0	ND(2.5)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.13)	ND(6.4)	ND(0.13)	ND(0.13)	0.53	ND(0.64)	ND(0.13)	ND(0.64)
	SI1-CS	crawlspace	3/18/09	0	0.94	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	0.57	ND(0.84)	ND(0.17)	ND(0.84)
	SI1-CS	crawlspace	1/28/10	0	ND(3.3)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(8.4)	ND(0.17)	ND(0.17)	0.45	ND(0.84)	ND(0.17)	ND(0.84)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth	Acrolein	Allyl Chloride	Benzyl-chloride	Bromo-dichloro-methane	Bromoform	Bromo-methane	Carbon Disulfide	Chloroethane	Chloroform	Chloromethane	1,2-Dibromo 3-chloro-propane	Dibromo-chloromethane	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane
				(ft-bgs)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)
SI 03	SI3-IA1	indoor air	3/15/09	0	3.1	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(0.5)	ND(2.5)	ND(0.5)	ND(0.5)	1.4	ND(2.5)	ND(0.5)	ND(2.5)
	SI3-IA1	indoor air	6/03/09	0	1.4 J	ND(0.17)	ND(0.17) J	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	0.5	ND(0.85)	ND(0.17)	ND(0.85)
	SI3-IA1	indoor air	7/02/09	0	1.3	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.98)	ND(0.2)	ND(0.98)	ND(0.2)	ND(0.2)	0.61	ND(0.98)	ND(0.2)	ND(0.98)
	SI3-IA1	indoor air	1/25/10	0	ND(3.5)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(8.9)	ND(0.18)	0.26	0.62	ND(0.89)	ND(0.18)	ND(0.89)
	SI3-IA1	indoor air	9/25/10	0	ND(3.4)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	ND(0.17)	0.41	ND(0.85)	ND(0.17)	ND(0.85)
	SI3-IA1	indoor air	12/03/10	0	ND(3.4)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	ND(0.17)	0.57	ND(0.85)	ND(0.17)	ND(0.85)
	SI3-IA1	indoor air	4/12/11	0	ND(3.4)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(8.6)	ND(0.17)	ND(0.17)	0.55	ND(0.86)	ND(0.17)	ND(0.86)
	SI3-IA1 Dup	indoor air	2/09/12	0	ND(3.7)	ND(0.19)	ND(0.94)	ND(0.19)	ND(0.94)	ND(0.19)	ND(9.4)	ND(0.19)	0.28	0.64	ND(0.94)	ND(0.19)	ND(0.94)
	SI3-IA1	indoor air	2/09/12	0	ND(3.6)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	ND(9.1)	ND(0.18)	0.3	0.68	ND(0.91)	ND(0.18)	ND(0.91)
	SI3-IA2	indoor air	3/15/09	0	7	ND(0.56)	ND(0.56)	ND(0.56)	ND(2.8)	ND(0.56)	ND(2.8)	ND(0.56)	ND(0.56)	2.1	ND(2.8)	ND(0.56)	ND(2.8)
	SI3-IA2	indoor air	6/03/09	0	1.2 J	ND(0.14)	ND(0.14) J	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	0.51	ND(0.72)	ND(0.14)	ND(0.72)
	SI3-IA2	indoor air	7/02/09	0	2	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.15)	0.66	ND(0.76)	ND(0.15)	ND(0.76)
	SI3-IA2	indoor air	9/25/10	0	ND(3.3)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.17)	ND(8.3)	ND(0.17)	ND(0.17)	0.43	ND(0.83)	ND(0.17)	ND(0.83)
	SI3-IA2	indoor air	12/03/10	0	ND(4.9)	ND(0.25)	ND(1.2)	ND(0.25)	ND(1.2)	ND(0.25)	ND(12)	ND(0.25)	ND(0.25)	0.59	ND(1.2)	ND(0.25)	ND(1.2)
	SI3-IA2	indoor air	2/09/12	0	ND(3.5)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.18)	ND(8.8)	ND(0.18)	0.43	0.7	ND(0.88)	ND(0.18)	ND(0.88)
	SI3-GA	garage air	3/15/09	0	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	0.56	ND(0.89)	ND(0.18)	ND(0.89)
	SI3-GA	garage air	6/03/09	0	ND(9.9) J	ND(2)	ND(2) J	ND(2)	ND(9.9)	ND(2)	ND(9.9)	ND(2)	ND(2)	ND(2)	ND(9.9)	ND(2)	ND(9.9)
	SI3-GA	garage air	7/02/09	0	2	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	0.57	ND(0.89)	ND(0.18)	ND(0.89)
	SI3-GA	garage air	1/25/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	0.56	ND(0.82)	ND(0.16)	ND(0.82)
	SI3-GA	garage air	9/25/10	0	ND(2.6)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.13)	ND(6.4)	ND(0.13)	ND(0.13)	0.32	ND(0.64)	ND(0.13)	ND(0.64)
	SI3-GA	garage air	12/03/10	0	ND(3)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(7.5)	ND(0.15)	ND(0.15)	0.45	ND(0.75)	ND(0.15)	ND(0.75)
	SI3-GA	garage air	4/12/11	0	ND(3.1)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(7.8)	ND(0.16)	ND(0.16)	0.6	ND(0.78)	ND(0.16)	ND(0.78)
	SI3-GA	garage air	2/09/12	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	0.62	ND(0.77)	ND(0.15)	ND(0.77)
	SI3-SS1	sub slab	3/16/09	0	ND(3.1)	ND(0.61)	ND(0.61)	ND(0.61)	ND(3.1)	ND(0.61)	ND(3.1)	ND(0.61)	ND(0.61)	0.73	ND(3.1)	ND(0.61)	ND(3.1)
	SI3-SS1	sub slab	6/02/09	0	ND(0.91) J	ND(0.18)	ND(0.18) J	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)
	SI3-SS1	sub slab	7/02/09	0	2.8	ND(0.17)	0.17	ND(0.17)	ND(0.85)	0.4	ND(0.85)	ND(0.17)	0.22	0.63	ND(0.85)	ND(0.17)	ND(0.85)
	SI3-SS1	sub slab	1/26/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	0.64 J	ND(0.82)	ND(0.16)	ND(0.82)
	SI3-SS1	sub slab	9/25/10	0	ND(3.9)	ND(0.2)	ND(0.98)	ND(0.2)	ND(0.98)	ND(0.2)	ND(9.8)	ND(0.2)	ND(0.2)	0.54	ND(0.98)	ND(0.2)	ND(0.98)
	SI3-SS1	sub slab	12/02/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	0.21	ND(0.16)	0.71	ND(0.82)	ND(0.16)	ND(0.82)
	SI3-SS1	sub slab	4/11/11	0	ND(3.4)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	ND(0.17)	ND(0.34)	ND(0.85)	ND(0.17)	ND(0.85)
	SI3-SS1	sub slab	2/09/12	0	ND(3.3)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(8.4)	ND(0.17)	0.28	0.63	ND(0.84)	ND(0.17)	ND(0.84)
	SI3-SS2	sub slab	3/16/09	0	ND(2.9)	ND(0.58)	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	ND(2.9)	ND(0.58)	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	ND(2.9)
	SI3-SS2	sub slab	6/02/09	0	ND(0.87) J	ND(0.17)	ND(0.17) J	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)
	SI3-SS2	sub slab	7/02/09	0	0.84	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)
	SI3-SS2	sub slab	1/26/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	ND(0.33)	ND(0.82)	ND(0.16)	ND(0.82)
	SI3-SS2	sub slab	9/25/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	8.7	ND(0.16)	ND(0.16)	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	SI3-SS2	sub slab	12/02/10	0	ND(3.8)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.19)	ND(9.5)	ND(0.19)	ND(0.19)	ND(0.38)	ND(0.95)	ND(0.19)	ND(0.95)
	SI3-SS2	sub slab	4/11/11	0	ND(9.6)	ND(0.48)	ND(2.4)	ND(0.48)	ND(2.4) J	ND(0.48)	ND(24)	ND(0.48)	ND(0.48)	1.2	ND(2.4)	ND(0.48)	ND(2.4)
	SI3-SS2	sub slab	2/09/12	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	0.27	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	SIOAH3	outdoor air	9/25/10	0	ND(3.4)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	ND(0.17)	ND(0.34)	ND(0.85)	ND(0.17)	ND(0.85)
	SIOAH3	outdoor air	12/03/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	0.46	ND(0.82)	ND(0.16)	ND(0.82)
	SIOAH3	outdoor air	4/12/11	0	ND(3.6)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.18)	ND(9)	ND(0.18)	ND(0.18)	0.6	ND(0.9)	ND(0.18)	ND(0.9)
	SI3-NS	near slab	3/19/09	6.5	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	0.5	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)
	SI3-NS	near slab	3/19/09	11.5	ND(35000)	ND(7100) J	ND(7100)	ND(7100)	ND(35000)	ND(7100)	ND(35000)	ND(7100)	ND(7100)	ND(7100)	ND(35000)	ND(7100)	ND(35000)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acrolein (ug/m³)	Allyl Chloride (ug/m³)	Benzyl-chloride (ug/m³)	Bromo-dichloro-methane (ug/m³)	Bromoform (ug/m³)	Bromo-methane (ug/m³)	Carbon Disulfide (ug/m³)	Chloroethane (ug/m³)	Chloroform (ug/m³)	Chloromethane (ug/m³)	1,2-Dibromo 3-chloro-propane (ug/m³)	Dibromo-chloromethane (ug/m³)	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane (ug/m³)
SI 03 cont.	SI3-NS Dup	near slab	3/19/09	11.5	ND(36000)	ND(7200) J	ND(7200)	ND(7200)	ND(36000)	ND(7200)	ND(36000)	ND(7200)	ND(7200)	ND(7200)	ND(36000)	ND(7200)	ND(36000)
	SI3-NS	near slab	9/24/10	6.5	ND(1700)	ND(85)	ND(430)	ND(85)	ND(430)	ND(85)	ND(4300)	ND(85)	ND(85)	ND(170)	ND(430)	ND(85)	ND(430)
	SI3-NS	near slab	9/24/10	11.5	ND(160000)	ND(8000)	ND(40000)	ND(8000)	ND(40000)	ND(8000)	ND(400000)	ND(8000)	ND(8000)	ND(16000)	ND(40000)	ND(8000)	ND(40000)
	SI3-NS	near slab	12/02/10	6.5	ND(8.7)	ND(0.43)	ND(2.2)	ND(0.43)	ND(2.2)	ND(0.43)	ND(22)	ND(0.43)	ND(0.43)	ND(0.87)	ND(2.2)	ND(0.43)	ND(2.2)
	SI3-NS	near slab	12/02/10	11.5	ND(64000)	ND(3200)	ND(16000)	ND(3200)	ND(16000)	ND(3200)	ND(160000)	ND(3200)	ND(3200)	ND(6400)	ND(16000)	ND(3200)	ND(16000)
	SI3-NS	near slab	4/11/11	6.5	ND(8.1)	ND(0.41)	ND(2)	ND(0.41)	ND(2)	ND(0.41)	ND(20)	ND(0.41)	ND(0.41)	ND(0.81)	ND(2)	ND(0.41)	ND(2)
	SI3-NS	near slab	4/11/11	11.5	ND(110000)	ND(5600)	ND(28000)	ND(5600)	ND(28000)	ND(5600)	ND(280000)	ND(5600)	ND(5600)	ND(11000)	ND(28000)	ND(5600)	ND(28000)
	SI3-NS	near slab	2/08/12	6.5	ND(8.4)	ND(0.42)	ND(2.1)	ND(0.42)	ND(2.1)	ND(0.42)	ND(21)	ND(0.42)	ND(0.42)	ND(0.84)	ND(2.1)	ND(0.42)	ND(2.1)
	SI3-NS	near slab	2/08/12	11.5	ND(220000)	ND(11000)	ND(56000)	ND(11000)	ND(56000)	ND(11000)	ND(560000)	ND(11000)	ND(11000)	ND(22000)	ND(56000)	ND(11000)	ND(56000)
	SI3-FF	indoor air	1/25/10	0	ND(3.8)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.19)	ND(9.5)	ND(0.19)	0.2	0.63	ND(0.95)	ND(0.19)	ND(0.95)
SI 04	SI4-IA	indoor air	3/15/09	0	1.9	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16) J	1.3	0.73	ND(0.82)	ND(0.16)	ND(0.82)
	SI4-IA Dup	indoor air	3/15/09	0	2.1	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	1.6	0.79 J	ND(0.86)	ND(0.17)	ND(0.86)
	SI4-IA	indoor air	1/23/10	0	3.6	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	0.2	0.59	ND(0.85)	ND(0.17)	ND(0.85)
	SI4-GA	garage air	3/15/09	0	1.9	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	3.7	0.64	ND(0.86)	ND(0.17)	ND(0.86)
	SI4-GA	garage air	1/23/10	0	ND(3.4)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(8.4)	ND(0.17)	ND(0.17)	0.49	ND(0.84)	ND(0.17)	ND(0.84)
	SI4-SS1	sub slab	3/15/09	0	0.82	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.15)	0.4	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)
	SI4-SS1	sub slab	1/24/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	0.19	0.36	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI4-SS2	sub slab	3/15/09	0	1.5	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.14)	1.3	ND(0.14)	0.94	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)
	SI4-SS2	sub slab	1/24/10	0	ND(3.1)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	0.81	ND(0.31)	ND(0.79)	ND(0.16)	ND(0.79)
SI 06	SI6-IA	indoor air	3/18/09	0	1.7	ND(0.17)	ND(0.17) J	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	0.25	0.63	ND(0.87)	ND(0.17)	ND(0.87)
	SI6-IA Dup	indoor air	3/18/09	0	2.1	ND(0.17)	ND(0.17) J	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	0.29	0.69	ND(0.85)	ND(0.17)	ND(0.85)
	SI6-SS1	sub slab	3/18/09	0	0.79	ND(0.14)	ND(0.14) J	ND(0.14)	ND(0.69)	ND(0.14)	3.5	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)
	SI6-SS2	sub slab	3/18/09	0	1.2	ND(0.13)	ND(0.13) J	ND(0.13)	ND(0.67)	ND(0.13)	18	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)
SI 07	SI7-IA	indoor air	3/21/09	0	1.9	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	1.1	0.51	ND(0.75)	ND(0.15)	ND(0.75)
	SI7-IA	indoor air	1/23/10	0	ND(3.9)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(9.7)	ND(0.19)	0.26	0.5	ND(0.97)	ND(0.19)	ND(0.97)
	SI7-GA	garage air	3/21/09	0	ND(1)	ND(0.21)	ND(0.21)	ND(0.21)	ND(1)	ND(0.21)	ND(1)	ND(0.21)	ND(0.21)	0.51	ND(1)	ND(0.21)	ND(1)
	SI7-GA	garage air	1/23/10	0	ND(3.2)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(8.1)	ND(0.16)	ND(0.16)	0.56	ND(0.81)	ND(0.16)	ND(0.81)
	SI7-SS1	sub slab	3/22/09	0	0.86	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.14)	0.17	ND(0.14) J	ND(0.71)	ND(0.14)	ND(0.71)
	SI7-SS1	sub slab	1/24/10	0	ND(3.3)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(8.4)	0.65	0.3	ND(0.33)	ND(0.84)	ND(0.17)	ND(0.84)
	SI7-SS2	sub slab	3/22/09	0	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.13)	1.3	ND(0.13)	ND(0.13)	ND(0.13) J	ND(0.67)	ND(0.13)	ND(0.67)
	SI7-SS2	sub slab	1/24/10	0	ND(3)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(7.5)	ND(0.15)	ND(0.15)	ND(0.3)	ND(0.75)	ND(0.15)	ND(0.75)
SI 08	SI8-IA	indoor air	3/17/09	0	2.1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	0.45	0.69	ND(0.82)	ND(0.16)	ND(0.82)
	SI8-IA	indoor air	1/25/10	0	ND(3)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(7.5)	ND(0.15)	ND(0.15)	0.4 J	ND(0.75)	ND(0.15)	ND(0.75)
	SI8-CS	crawlspace	3/17/09	0	1.1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	0.31	0.62	ND(0.8)	ND(0.16)	ND(0.8)
	SI8-CS	crawlspace	1/25/10	0	ND(3.9)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(9.7)	ND(0.19)	ND(0.19)	0.41 J	ND(0.97)	ND(0.19)	ND(0.97)
	SI8-SS1	sub slab	3/17/09	0	1.2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.14)	0.16	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)
	SI8-SS1	sub slab	1/26/10	0	ND(2.9)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.15)	ND(7.4)	ND(0.15)	ND(0.15)	ND(0.29) J	ND(0.74)	ND(0.15)	ND(0.74)
SI 09	SI9-IA	indoor air	3/21/09	0	1.6	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.18)	0.64	ND(0.9)	ND(0.18)	ND(0.9)
	SI9-IA	indoor air	2/01/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	0.31	ND(0.33)	ND(0.82)	ND(0.16)	ND(0.82)
	SI9-CS	crawlspace	3/21/09	0	1	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.14)	0.55	ND(0.7)	ND(0.14)	ND(0.7)
	SI9-CS	crawlspace	2/01/10	0	ND(3.5)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.18)	ND(8.8)	ND(0.18)	ND(0.18)	ND(0.35)	ND(0.88)	ND(0.18)	ND(0.88)
	SI9-DP	deep probe	3/21/09	0	1.4	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	0.29	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)
	SI9-SS1	sub slab	3/21/09	0	0.98	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.13)	5.3	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.13)	ND(0.66)
	SI9-SS1	sub slab	1/30/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	ND(0.33)	ND(0.82)	ND(0.16)	ND(0.82)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acrolein (ug/m³)	Allyl Chloride (ug/m³)	Benzyl-chloride (ug/m³)	Bromo-dichloro-methane (ug/m³)	Bromoform (ug/m³)	Bromo-methane (ug/m³)	Carbon Disulfide (ug/m³)	Chloroethane (ug/m³)	Chloroform (ug/m³)	Chloromethane (ug/m³)	1,2-Dibromo 3-chloro-propane (ug/m³)	Dibromo-chloromethane (ug/m³)	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane (ug/m³)
SI 10	SI10-IA	indoor air	3/17/09	0	1.7	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	0.63	ND(0.78)	ND(0.16)	ND(0.78)
	SI10-IA	indoor air	12/08/09	0	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.34)	ND(0.17)	0.3	ND(0.85)	ND(0.17)	ND(0.85)
	SI10-CS	crawlspace	3/17/09	0	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	0.57	ND(0.87)	ND(0.17)	ND(0.87)
	SI10-CS	crawlspace	2/01/10	0	ND(2.9)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.15)	ND(7.3)	ND(0.15)	ND(0.15)	ND(0.29)	ND(0.73)	ND(0.15)	ND(0.73)
	SI10-SS1	sub slab	3/17/09	0	1.2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	0.25	ND(0.72)	ND(0.14)	ND(0.72)
	SI10-SS1	sub slab	12/07/09	0	ND(11)	ND(2.1)	ND(2.1)	ND(2.1)	ND(11)	ND(2.1)	ND(110)	ND(4.3)	ND(2.1)	ND(2.1)	ND(11)	ND(2.1)	ND(11)
	SI10-SS1	sub slab	3/30/10	0	ND(3.4)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(8.6)	ND(0.17)	ND(0.17)	ND(0.34)	ND(0.86)	ND(0.17)	ND(0.86)
	SI10-SS1	sub slab	4/23/10	0	ND(4)	ND(0.2)	ND(1)	ND(0.2)	ND(1)	ND(0.2)	ND(10)	ND(0.2)	ND(0.2)	ND(0.4)	ND(1)	ND(0.2)	ND(1)
	SI10-SS2	sub slab	3/17/09	0	ND(0.94)	ND(0.19)	ND(0.19) J	ND(0.19)	ND(0.94)	ND(0.19)	ND(0.94)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.94)	ND(0.19)	ND(0.94)
	SI10-SS2	sub slab	12/09/09	0	ND(11)	ND(2.3)	ND(2.3)	ND(2.3)	ND(11)	ND(2.3)	ND(110)	ND(4.6)	ND(2.3)	ND(2.3)	ND(11)	ND(2.3)	ND(11)
	SI10-SS2	sub slab	3/30/10	0	ND(3.2)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	ND(8)	0.38	ND(0.16)	ND(0.32)	ND(0.8)	ND(0.16)	ND(0.8)
	SI10-SS2	sub slab	4/23/10	0	ND(3.6)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	ND(9.1)	ND(0.18)	ND(0.18)	ND(0.36)	ND(0.91)	ND(0.18)	ND(0.91)
	SI10-CS1	crawlspace	1/30/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	0.35	ND(0.79)	ND(0.16)	ND(0.79)
	SI10-NS	near slab	12/09/09	4.3	ND(4.8)	ND(0.96)	ND(0.96)	ND(0.96)	ND(4.8)	ND(0.96)	ND(48)	ND(1.9)	ND(0.96)	ND(0.96)	ND(4.8)	ND(0.96)	ND(4.8)
	SI10-NS	near slab	12/09/09	8.3	ND(38)	ND(7.7)	ND(7.7)	ND(7.7)	ND(38)	ND(7.7)	ND(380)	ND(15)	ND(7.7)	ND(7.7)	ND(38)	ND(7.7)	ND(38)
	SI10-NS	near slab	1/26/10	8.3	9.6	0.48	ND(2.4)	ND(0.47)	ND(2.4)	ND(0.47)	ND(24)	2	ND(0.47)	15	ND(2.4)	ND(0.47)	ND(2.4)
	SI10-NS	near slab	1/26/10	13.3	ND(12)	ND(0.6)	ND(3)	ND(0.6)	ND(3)	ND(0.6)	ND(30)	ND(0.6)	ND(0.6)	1.2	ND(3)	ND(0.6)	ND(3)
	SI10-NS	near slab	1/27/10	4.3	ND(11)	ND(0.55)	ND(2.8)	ND(0.55)	ND(2.8)	ND(0.55)	ND(28)	0.91	0.77	1.3	ND(2.8)	ND(0.55)	ND(2.8)
	SI10-NS	near slab	3/29/10	4.3	ND(11)	ND(0.54)	ND(2.7)	ND(0.54)	ND(2.7)	ND(0.54)	ND(27)	ND(0.54)	ND(0.54)	ND(1.1)	ND(2.7)	ND(0.54)	ND(2.7)
	SI10-NS	near slab	3/29/10	8.3	ND(11)	ND(0.54)	ND(2.7)	ND(0.54)	ND(2.7)	ND(0.54)	ND(27)	ND(0.54)	ND(0.54)	ND(1.1)	ND(2.7)	ND(0.54)	ND(2.7)
	SI10-NS	near slab	3/29/10	13.3	ND(12)	ND(0.58)	ND(2.9)	ND(0.58)	ND(2.9)	ND(0.58)	ND(29)	0.89	ND(0.58)	ND(1.2)	ND(2.9)	ND(0.58)	ND(2.9)
	SI10-NS	near slab	4/23/10	4.3	ND(9.2)	ND(0.46)	ND(2.3)	ND(0.46)	ND(2.3)	ND(0.46)	ND(23)	ND(0.46)	ND(0.46)	ND(0.92)	ND(2.3)	ND(0.46)	ND(2.3)
	SI10-NS	near slab	4/23/10	8.3	ND(12)	ND(0.6)	ND(3)	ND(0.6)	ND(3)	ND(0.6)	ND(30)	ND(0.6)	ND(0.6)	ND(1.2)	ND(3)	ND(0.6)	ND(3)
	SI10-NS	near slab	4/23/10	13.3	ND(8.3)	ND(0.42)	ND(2.1)	ND(0.42)	ND(2.1)	ND(0.42)	ND(21)	ND(0.42)	ND(0.42)	ND(0.83)	ND(2.1)	ND(0.42)	ND(2.1)
	SI10-OA	outdoor air	12/08/09	0	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(7.2)	ND(0.29)	ND(0.14)	0.29	ND(0.72)	ND(0.14)	ND(0.72)
	SI10-SS3	sub slab	1/26/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	SI10-SS3	sub slab	4/23/10	0	ND(4.1)	ND(0.21)	ND(1)	ND(0.21)	ND(1)	ND(0.21)	ND(10)	ND(0.21)	ND(0.21)	ND(0.41)	ND(1)	ND(0.21)	ND(1)
	SI10-SS4	sub slab	1/26/10	0	ND(3)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.15)	ND(7.4)	ND(0.15)	ND(0.15)	ND(0.3)	ND(0.74)	ND(0.15)	ND(0.74)
SI 12	SI12-IA	indoor air	3/14/09	0	1.3	ND(0.21)	ND(0.21)	ND(0.21)	ND(1.1)	ND(0.21)	ND(1.1)	ND(0.21)	2.7	0.59 J	ND(1.1)	ND(0.21)	ND(1.1)
	SI12-IA	indoor air	1/27/10	0	3.3	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	0.41	ND(0.79)	ND(0.16)	ND(0.79)
	SI12-CS	crawlspace	3/14/09	0	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	0.17	0.46 J	ND(0.79)	ND(0.16)	ND(0.79)
	SI12-CS	crawlspace	1/27/10	0	ND(2.9)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.15)	ND(7.4)	ND(0.15)	ND(0.15)	0.37	ND(0.74)	ND(0.15)	ND(0.74)
SI 13	SI13-IA	indoor air	3/18/09	0	6	ND(0.45)	ND(0.45) J	ND(0.45)	ND(2.2)	ND(0.45)	ND(2.2)	ND(0.45)	ND(0.45)	1.7	ND(2.2)	ND(0.45)	ND(2.2)
	SI13-IA	indoor air	1/24/10	0	4.6	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.92)	ND(0.18)	ND(9.2)	ND(0.18)	0.28	0.64	ND(0.92)	ND(0.18)	ND(0.92)
	SI13-GA	garage air	3/18/09	0	1.9	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.19)	0.49	ND(0.93)	ND(0.19)	ND(0.93)
	SI13-GA	garage air	1/24/10	0	ND(3.4)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(8.6)	ND(0.17)	ND(0.17)	0.53	ND(0.86)	ND(0.17)	ND(0.86)
	SI13-SS1	sub slab	3/18/09	0	2	ND(0.15)	ND(0.15) J	ND(0.15)	ND(0.75)	ND(0.15)	1.8	0.61	ND(0.15)	0.29	ND(0.75)	ND(0.15)	ND(0.75)
	SI13-SS1	sub slab	1/25/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	ND(0.33)	ND(0.82)	ND(0.16)	ND(0.82)
	SI13-SS2	sub slab	3/18/09	0	1.8	ND(0.14)	ND(0.14) J	ND(0.14)	ND(0.71)	ND(0.14)	14	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)
	SI13-SS2	sub slab	1/25/10	0	ND(3.2)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	ND(8)	0.28 J	ND(0.16)	ND(0.32)	ND(0.8)	ND(0.16)	ND(0.8)
	SI13-SS2 Dup	sub slab	1/25/10	0	ND(3.2)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(8.1)	0.46 J	0.17	0.49	ND(0.81)	ND(0.16)	ND(0.81)
SI 14	SI14-IA	indoor air	3/16/09	0	0.95	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.18)	0.5	ND(0.91)	ND(0.18)	ND(0.91)
	SI14-SS1	sub slab	3/16/09	0	0.92	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.13)	0.13	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)
	SI14-SS2	sub slab	3/16/09	0	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acrolein (ug/m³)	Allyl Chloride (ug/m³)	Benzyl-chloride (ug/m³)	Bromo-dichloro-methane (ug/m³)	Bromoform (ug/m³)	Bromo-methane (ug/m³)	Carbon Disulfide (ug/m³)	Chloroethane (ug/m³)	Chloroform (ug/m³)	Chloromethane (ug/m³)	1,2-Dibromo 3-chloro-propane (ug/m³)	Dibromo-chloromethane (ug/m³)	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane (ug/m³)
SI 23	SI23-IA	indoor air	3/17/09	0	1.9	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.74)	ND(0.15)	0.74	0.73	ND(0.74)	ND(0.15)	ND(0.74)
	SI23-IA	indoor air	1/27/10	0	ND(4)	ND(0.2)	ND(0.99)	ND(0.2)	ND(0.99)	ND(0.2)	ND(9.9)	ND(0.2)	2.8	1.2	ND(0.99)	ND(0.2)	ND(0.99)
	SI23-GA	garage air	3/17/09	0	0.98	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	0.6	ND(0.64)	ND(0.13)	ND(0.64)
	SI23-GA	garage air	1/27/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	0.59	ND(0.79)	ND(0.16)	ND(0.79)
	SI23-CS	crawlspace	3/17/09	0	2.1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	0.49	ND(0.79)	ND(0.16)	ND(0.79)
	SI23-CS	crawlspace	1/27/10	0	ND(3.4)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	0.34	0.35	ND(0.85)	ND(0.17)	ND(0.85)
	SI23-DP	deep probe	3/17/09	0	5.4	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.98)	ND(0.2)	8.9	0.32	0.44	0.27	ND(0.98)	ND(0.2)	ND(0.98)
	SI23-DP	deep probe	1/28/10	0	ND(2.7)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.13)	ND(6.7)	ND(0.13)	0.14	ND(0.27)	ND(0.67)	ND(0.13)	ND(0.67)
	SI23-SS1	sub slab	3/17/09	0	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	2 J	ND(0.14)	0.28	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)
	SI23-SS1 Dup	sub slab	3/17/09	0	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	0.93 J	ND(0.14)	0.27	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)
SI 24	SI24-IA	indoor air	3/21/09	0	1.5	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.85	ND(0.77)	ND(0.15)	ND(0.77)
	SI24-IA	indoor air	1/29/10	0	ND(2.2)	ND(0.11)	ND(0.56)	ND(0.11)	ND(0.56)	ND(0.11)	ND(5.6)	ND(0.11)	ND(0.11)	ND(0.22)	ND(0.56)	ND(0.11)	ND(0.56)
	SI24-IA Dup	indoor air	1/29/10	0	ND(3.3)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(8.4)	ND(0.17)	ND(0.17)	ND(0.33)	ND(0.84)	ND(0.17)	ND(0.84)
	SI24-SS1	sub slab	3/22/09	0	1.6 J	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	0.83 J	ND(0.13)	1.5	ND(0.13) J	ND(0.64)	ND(0.13)	ND(0.64)
	SI24-SS1 Dup	sub slab	3/22/09	0	ND(0.65) J	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.13)	2.1 J	ND(0.13)	1.6	ND(0.13) J	ND(0.65)	ND(0.13)	ND(0.65)
	SI24-SS1	sub slab	1/30/10	0	ND(2.7)	ND(0.14)	ND(0.68)	ND(0.14)	ND(0.68)	ND(0.14)	ND(6.8)	ND(0.14)	1.2	ND(0.27)	ND(0.68)	ND(0.14)	ND(0.68)
	SI24-SS2	sub slab	3/22/09	0	0.86	ND(0.13)	ND(0.13)	0.19	ND(0.66)	ND(0.13)	ND(0.66)	ND(0.13)	3.1	ND(0.13) J	ND(0.66)	ND(0.13)	ND(0.66)
	SI24-SS2	sub slab	1/30/10	0	ND(3.1)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(7.8)	0.51	4	ND(0.31)	ND(0.78)	ND(0.16)	ND(0.78)
SI 25	SI25-IA	indoor air	3/14/09	0	1.2	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	0.88 J	ND(0.82)	ND(0.16)	ND(0.82)
	SI25-IA	indoor air	1/24/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	0.17	0.85	ND(0.82)	ND(0.16)	ND(0.82)
	SI25-IA Dup	indoor air	1/24/10	0	3.7	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	0.19	0.95	ND(0.85)	ND(0.17)	ND(0.85)
	SI25-GA	garage air	3/14/09	0	ND(0.89)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.18)	1.3 J	ND(0.89)	ND(0.18)	ND(0.89)
	SI25-GA	garage air	1/24/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	0.24	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	SI25-CS	crawlspace	3/14/09	0	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	0.55 J	ND(0.72)	ND(0.14)	ND(0.72)
	SI25-CS	crawlspace	1/24/10	0	ND(3.1)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(7.8)	ND(0.16)	ND(0.16)	0.56	ND(0.78)	ND(0.16)	ND(0.78)
	SI25-SS1	sub slab	3/14/09	0	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(28)
	SI25-SS1 Dup	sub slab	3/14/09	0	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(28)
	SI25-SS1	sub slab	1/26/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	0.45	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI25-SS1 Dup	sub slab	1/26/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	0.45	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
SI 26	SI26-IA	indoor air	3/14/09	0	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	0.56 J	ND(0.78)	ND(0.16)	ND(0.78)
	SI26-CS	crawlspace	3/14/09	0	ND(0.91)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.18)	0.53 J	ND(0.91)	ND(0.18)	ND(0.91)
SI 27	SI27-IA	indoor air	3/15/09	0	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	0.7 J	ND(0.86)	ND(0.17)	ND(0.86)
	SI27-CS	crawlspace	3/15/09	0	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	0.52 J	ND(0.85)	ND(0.17)	ND(0.85)
SI 28	SI28-FFA	indoor air	3/20/09	0	2.1	ND(0.16)	ND(0.16)	0.18	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	5.6	0.49	ND(0.79)	ND(0.16)	ND(0.79)
	SI28-IA	indoor air	3/20/09	0	2	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	1.3	0.44	ND(0.78)	ND(0.16)	ND(0.78)
	SI28-IA	indoor air	1/27/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	0.46	ND(0.77)	ND(0.15)	ND(0.77)
	SI28-GA	garage air	3/20/09	0	ND(0.78)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.16)	0.39	ND(0.78)	ND(0.16)	ND(0.78)
	SI28-GA	garage air	1/27/10	0	ND(3)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.15)	ND(7.6)	ND(0.15)	ND(0.15)	0.42	ND(0.76)	ND(0.15)	ND(0.76)
	SI28-SS1	sub slab	3/20/09	0	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	3.6	ND(0.15)	0.68	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)
	SI28-SS1	sub slab	1/28/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	0.34 J	0.31	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	SI28-SS1 Dup	sub slab	1/28/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	0.22 J	0.31	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
	SI28-SS2	sub slab	3/20/09	0	4.1	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	3.6	ND(0.14)	0.94	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)
	SI28-SS2	sub slab	1/28/10	0	ND(3)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.15)	ND(7.6)	ND(0.15)	0.36	ND(0.3)	ND(0.76)	ND(0.15)	ND(0.76)
	SI28-NS	near slab	3/20/09	15	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	3.3	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acrolein (ug/m³)	Allyl Chloride (ug/m³)	Benzyl-chloride (ug/m³)	Bromo-dichloro-methane (ug/m³)	Bromoform (ug/m³)	Bromo-methane (ug/m³)	Carbon Disulfide (ug/m³)	Chloroethane (ug/m³)	Chloroform (ug/m³)	Chloromethane (ug/m³)	1,2-Dibromo 3-chloro-propane (ug/m³)	Dibromo-chloromethane (ug/m³)	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane (ug/m³)
SI 28 cont.	SI28-NS	near slab	3/20/09	25	ND(0.77)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	19	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)
	SI28-NS	near slab	3/21/09	5	0.78	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.74)	ND(0.15)	5.3	ND(0.15)	0.45	ND(0.15)	ND(0.74)	ND(0.15)	ND(0.74)
	SI28-NS	near slab	3/21/09	10	2	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.18)	3.1	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.92)
	SI28-NS	near slab	3/21/09	20	ND(1.4)	ND(0.29)	ND(0.29)	ND(0.29)	ND(1.4)	ND(0.29)	17	ND(0.29)	0.33	ND(0.29)	ND(1.4)	ND(0.29)	ND(1.4)
	SI28-FF	indoor air	1/27/10	0	ND(4.2)	ND(0.21)	ND(1.1)	ND(0.21)	ND(1.1)	ND(0.21)	ND(11)	ND(0.21)	ND(0.21)	0.46	ND(1.1)	ND(0.21)	ND(1.1)
SI 29	SI29-IA	indoor air	3/15/09	0	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	0.58 J	ND(0.73)	ND(0.15)	ND(0.73)
	SI29-IA	indoor air	1/25/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	0.38	0.52	ND(0.77)	ND(0.15)	ND(0.77)
	SI29-CS	crawlspace	3/15/09	0	ND(0.73)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.15)	0.54	ND(0.73)	ND(0.15)	ND(0.73)
	SI29-CS	crawlspace	1/25/10	0	ND(3.7)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.92)	ND(0.18)	ND(9.2)	ND(0.18)	0.19	0.46	ND(0.92)	ND(0.18)	ND(0.92)
SI 30	SI30-IA	indoor air	3/16/09	0	1.7	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.17)	0.5	ND(0.84)	ND(0.17)	ND(0.84)
	SI30-IA Dup	indoor air	3/16/09	0	1.7	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.18)	0.49	ND(0.9)	ND(0.18)	ND(0.9)
	SI30-IA	indoor air	1/23/10	0	ND(3.6)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	ND(9.1)	ND(0.18)	ND(0.18)	0.41	ND(0.91)	ND(0.18)	ND(0.91)
	SI30-SS1	sub slab	3/16/09	0	1.1	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	2.9	0.3	0.18	0.28	ND(0.69)	ND(0.14)	ND(0.69)
	SI30-SS2	sub slab	3/16/09	0	1.6 J	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.68)	ND(0.14)	0.8 J	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.68)	ND(0.14)	ND(0.68)
	SI30-SS2 Dup	sub slab	3/16/09	0	0.96 J	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	1.5 J	0.26	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)
SI 31	SI31-IA	indoor air	3/14/09	0	2.3	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.19)	0.44 J	ND(0.97)	ND(0.19)	ND(0.97)
	SI31-IA	indoor air	1/28/10	0	ND(3.8)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.19)	ND(9.5)	ND(0.19)	0.43	0.61	ND(0.95)	ND(0.19)	ND(0.95)
	SI31-CS	crawlspace	3/14/09	0	1.9	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.17)	0.47 J	ND(0.85)	ND(0.17)	ND(0.85)
	SI31-CS	crawlspace	1/28/10	0	ND(3.7)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.19)	ND(9.3)	ND(0.19)	0.21	0.44	ND(0.93)	ND(0.19)	ND(0.93)
	SI31-SS1	sub slab	3/14/09	0	1.6	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	1.2	ND(0.15)	0.18	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)
	SI31-SS1	sub slab	1/29/10	0	ND(3.5)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(8.7)	ND(0.17)	ND(0.17)	ND(0.35)	ND(0.87)	ND(0.17)	ND(0.87)
	SI31-SS1 Dup	sub slab	1/29/10	0	ND(3.5)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(8.7)	ND(0.17)	ND(0.17)	ND(0.35)	ND(0.87)	ND(0.17)	ND(0.87)
	SI31-SS2	sub slab	3/14/09	0	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	1.1	ND(0.14)	1.7	0.2	ND(0.72)	ND(0.14)	ND(0.72)
	SI31-SS2	sub slab	1/29/10	0	ND(3.1)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(7.8)	ND(0.16)	1.2	ND(0.31)	ND(0.78)	ND(0.16)	ND(0.78)
SI 32	SI32-IA	indoor air	3/18/09	0	2.8	ND(0.52)	ND(0.52)	ND(0.52)	ND(2.6)	ND(0.52)	ND(2.6)	ND(0.52)	0.58	1.4	ND(2.6)	ND(0.52)	ND(2.6)
	SI32-IA	indoor air	1/27/10	0	ND(3.8)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.19)	ND(9.5)	ND(0.19)	20	0.62	ND(0.95)	ND(0.19)	ND(0.95)
	SI32-CS	crawlspace	3/18/09	0	ND(1.1)	ND(0.22)	ND(0.22) J	ND(0.22)	ND(1.1)	ND(0.22)	ND(1.1)	ND(0.22)	ND(0.22)	ND(0.22)	ND(1.1)	ND(0.22)	ND(1.1)
	SI32-CS	crawlspace	1/27/10	0	ND(3.5)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(8.7)	ND(0.17)	0.26	0.36	ND(0.87)	ND(0.17)	ND(0.87)
	SI32-DP	deep probe	3/18/09	0	ND(0.71)	ND(0.14)	ND(0.14) J	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.14)	0.27	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)
	SI32-DP Dup	deep probe	3/18/09	0	0.84	ND(0.14)	ND(0.14) J	ND(0.14)	ND(0.71)	ND(0.14)	1.4	ND(0.14)	0.27	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)
	SI32-DP	deep probe	1/28/10	0	ND(6.1)	ND(0.3)	ND(1.5)	ND(0.3)	ND(1.5)	ND(0.3)	ND(15)	ND(0.3)	0.66	ND(0.61)	ND(1.5)	ND(0.3)	ND(1.5)
	SI32-DP Dup	deep probe	1/28/10	0	ND(3.6)	ND(0.18)	ND(0.91)	ND(0.18)	ND(0.91)	ND(0.18)	13	ND(0.18)	0.65	ND(0.36)	ND(0.91)	ND(0.18)	ND(0.91)
SI 33	SI33-IA	indoor air	3/15/09	0	2	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	0.6 J	ND(0.87)	ND(0.17)	ND(0.87)
	SI33-IA	indoor air	1/23/10	0	ND(2.7)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.13)	ND(6.7)	ND(0.13)	ND(0.13)	0.53	ND(0.67)	ND(0.13)	ND(0.67)
	SI33-CS	crawlspace	3/15/09	0	1.2	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.17)	0.5 J	ND(0.87)	ND(0.17)	ND(0.87)
	SI33-CS	crawlspace	1/23/10	0	ND(3.7)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.19)	ND(9.3)	ND(0.19)	ND(0.19)	0.43	ND(0.93)	ND(0.19)	ND(0.93)
	SI33-GA	garage air	1/23/10	0	ND(3.5)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(8.7)	ND(0.17)	ND(0.17)	0.6	ND(0.87)	ND(0.17)	ND(0.87)
SI 34	SI34-IA	indoor air	3/14/09	0	1.3	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.19)	0.23	0.58 J	ND(0.96)	ND(0.19)	ND(0.96)
	SI34-CS	crawlspace	3/14/09	0	2.7 J	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.16)	0.44 J	ND(0.82)	ND(0.16)	ND(0.82)
	SI34-CS Dup	crawlspace	3/14/09	0	ND(0.64) J	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.64)	ND(0.13)	ND(0.13)	0.44	ND(0.64)	ND(0.13)	ND(0.64)
	SI34-DP	deep probe	3/14/09	0	0.87	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	1.4	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acrolein (ug/m³)	Allyl Chloride (ug/m³)	Benzyl-chloride (ug/m³)	Bromo-dichloro-methane (ug/m³)	Bromoform (ug/m³)	Bromo-methane (ug/m³)	Carbon Disulfide (ug/m³)	Chloroethane (ug/m³)	Chloroform (ug/m³)	Chloromethane (ug/m³)	1,2-Dibromo 3-chloro-propane (ug/m³)	Dibromo-chloromethane (ug/m³)	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane (ug/m³)
SI 35	SI35-IA	indoor air	3/15/09	0	0.97	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	0.19	0.75 J	ND(0.86)	ND(0.17)	ND(0.86)
	SI35-IA	indoor air	1/26/10	0	ND(3.2)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(8.1)	ND(0.16)	ND(0.16)	0.51	ND(0.81)	ND(0.16)	ND(0.81)
	SI35-GA	garage air	3/15/09	0	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	0.66 J	ND(0.8)	ND(0.16)	ND(0.8)
	SI35-GA	garage air	1/26/10	0	ND(3)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)	ND(0.15)	ND(7.5)	ND(0.15)	ND(0.15)	0.51	ND(0.75)	ND(0.15)	ND(0.75)
	SI35-SS1	sub slab	3/15/09	0	ND(0.66)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.13)	2.9	ND(0.13)	110	ND(0.13)	ND(0.66)	ND(0.13)	ND(0.66)
	SI35-SS1	sub slab	1/27/10	0	ND(4.7)	ND(0.24)	ND(1.2)	ND(0.24)	ND(1.2)	ND(0.24)	12	ND(0.24)	0.7	ND(0.47)	ND(1.2)	ND(0.24)	ND(1.2)
	SI35-SS2	sub slab	3/15/09	0	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)
	SI35-SS2	sub slab	1/27/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
SI 36	SI36-IA	indoor air	3/17/09	0	4	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.19)	0.54	0.71	ND(0.93)	ND(0.19)	ND(0.93)
	SI36-IA	indoor air	1/26/10	0	5.4	ND(0.19)	ND(0.94)	ND(0.19)	ND(0.94)	ND(0.19)	ND(9.4)	ND(0.19)	0.25	0.5	ND(0.94)	ND(0.19)	ND(0.94)
	SI36-CS	crawlspace	3/17/09	0	1.2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.14)	0.16	ND(0.72)	ND(0.14)	ND(0.72)
	SI36-CS	crawlspace	1/26/10	0	ND(2.6)	ND(0.13)	ND(0.65)	ND(0.13)	ND(0.65)	ND(0.13)	ND(6.5)	ND(0.13)	ND(0.13)	ND(0.26)	ND(0.65)	ND(0.13)	ND(0.65)
SI 37	SI37-IA	indoor air	3/17/09	0	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	0.22	0.54	ND(0.82)	ND(0.16)	ND(0.82)
	SI37-IA	indoor air	1/26/10	0	ND(3.4)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(8.6)	ND(0.17)	ND(0.17)	0.49	ND(0.86)	ND(0.17)	ND(0.86)
	SI37-SS1	sub slab	3/17/09	0	0.67	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.65)	ND(0.13)	2.8	ND(0.13)	2.6	ND(0.13)	ND(0.65)	ND(0.13)	ND(0.65)
	SI37-SS1	sub slab	1/27/10	0	ND(6.2)	ND(0.31)	ND(1.5)	ND(0.31)	ND(1.5)	ND(0.31)	ND(15)	ND(0.31)	3.7	2.1 J	ND(1.5)	ND(0.31)	ND(1.5)
	SI37-SS1 Dup	sub slab	1/27/10	0	ND(3.1)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	3.6	ND(0.31) J	ND(0.79)	ND(0.16)	ND(0.79)
	SI37-SS2	sub slab	3/17/09	0	ND(0.7)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	0.73	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)
SI 38	SI38-IA	indoor air	3/17/09	0	35	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.92)	0.43	ND(0.92)	0.32	0.33	13	ND(0.92)	ND(0.18)	ND(0.92)
	SI38-IA	indoor air	1/25/10	0	5.9	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	0.19	2.4 J	ND(0.85)	ND(0.17)	ND(0.85)
	SI38-CS	crawlspace	3/17/09	0	1.1	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	0.54	ND(0.79)	ND(0.16)	ND(0.79)
	SI38-CS Dup	crawlspace	3/17/09	0	1.2	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	0.47	ND(0.86)	ND(0.17)	ND(0.86)
	SI38-CS	crawlspace	1/25/10	0	ND(3.5)	ND(0.18)	ND(0.89)	ND(0.18)	ND(0.89)	ND(0.18)	ND(8.9)	ND(0.18)	ND(0.18)	0.45 J	ND(0.89)	ND(0.18)	ND(0.89)
SI 39	SI39-IA	indoor air	3/19/09	0	1.8	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	0.19	0.67	ND(0.85)	ND(0.17)	ND(0.85)
	SI39-IA Dup	indoor air	3/19/09	0	1.9	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.18)	0.66	ND(0.9)	ND(0.18)	ND(0.9)
	SI39-IA	indoor air	1/24/10	0	ND(3.3)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.17)	ND(8.3)	ND(0.17)	0.29	0.57	ND(0.83)	ND(0.17)	ND(0.83)
	SI39-SS1	sub slab	3/19/09	0	2.7	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	4.9	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)
	SI39-SS1	sub slab	1/25/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI39-SS2	sub slab	3/19/09	0	1.1	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.75)	ND(0.15)	2	ND(0.15)	0.67	ND(0.15)	ND(0.75)	ND(0.15)	ND(0.75)
	SI39-SS2	sub slab	1/25/10	0	ND(3.3)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.17)	ND(8.3)	ND(0.17)	0.86	ND(0.33)	ND(0.83)	ND(0.17)	ND(0.83)
SI 40	SI40-IA1	indoor air	3/21/09	0	1.7	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.19)	0.5	ND(0.93)	ND(0.19)	ND(0.93)
	SI40-IA1	indoor air	2/01/10	0	ND(3.6)	ND(0.18)	ND(0.9)	ND(0.18)	ND(0.9)	ND(0.18)	ND(9)	ND(0.18)	0.66	0.53	ND(0.9)	ND(0.18)	ND(0.9)
	SI40-IA2	indoor air	3/21/09	0	ND(0.79)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	0.46	0.54	ND(0.79)	ND(0.16)	ND(0.79)
	SI40-IA2	indoor air	2/01/10	0	ND(3.4)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	ND(8.5)	ND(0.17)	2.2	0.54	ND(0.85)	ND(0.17)	ND(0.85)
	SI40-IA3	indoor air	3/21/09	0	2	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	1.5	0.58	ND(0.8)	ND(0.16)	ND(0.8)
	SI40-IA3	indoor air	2/01/10	0	ND(2.8)	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.14)	ND(7.1)	ND(0.14)	3.9	0.58	ND(0.71)	ND(0.14)	ND(0.71)
	SI40-CS1	crawlspace	3/21/09	0	ND(0.87)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	0.2	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)
	SI40-CS1 Dup	crawlspace	3/21/09	0	ND(0.82)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	0.23	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)
	SI40-CS1	crawlspace	2/01/10	0	ND(3.8)	ND(0.19)	ND(0.96)	ND(0.19)	ND(0.96)	ND(0.19)	ND(9.6)	ND(0.19)	0.51	ND(0.38)	ND(0.96)	ND(0.19)	ND(0.96)
	SI40-CS1 Dup	crawlspace	2/01/10	0	ND(3.9)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(9.7)	ND(0.19)	0.48	ND(0.39)	ND(0.97)	ND(0.19)	ND(0.97)
	SI40-CS2	crawlspace	3/21/09	0	ND(0.85)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	0.26	0.44	ND(0.85)	ND(0.17)	ND(0.85)
	SI40-CS2	crawlspace	2/01/10	0	ND(3.7)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.92)	ND(0.18)	ND(9.2)	ND(0.18)	0.88	0.46	ND(0.92)	ND(0.18)	ND(0.92)
	SI40-SS1	sub slab	3/21/09	0	2.5	ND(0.16)	ND(0.16)	0.62	ND(0.8)	ND(0.16)	3.1	1.3	4	0.47	ND(0.8)	ND(0.16)	ND(0.8)
	SI40-SS1	sub slab	1/30/10	0	ND(6.9)	ND(0.35)	ND(1.7)	ND(0.35)	ND(1.7)	0.87 J	ND(17)	ND(0.35)	0.35	ND(0.69)	ND(1.7)	ND(0.35)	ND(1.7)
	SI40-SS1 Dup	sub slab	1/30/10	0	ND(3.5)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17) J	ND(8.7)	0.21	0.35	ND(0.35)	ND(0.87)	ND(0.17)	ND(0.87)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	Acrolein (ug/m³)	Allyl Chloride (ug/m³)	Benzyl-chloride (ug/m³)	Bromo-dichloro-methane (ug/m³)	Bromoform (ug/m³)	Bromo-methane (ug/m³)	Carbon Disulfide (ug/m³)	Chloroethane (ug/m³)	Chloroform (ug/m³)	Chloromethane (ug/m³)	1,2-Dibromo 3-chloro-propane (ug/m³)	Dibromo-chloromethane (ug/m³)	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane (ug/m³)
SI 41	SI41-IA1	indoor air	3/21/09	0	1.4	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	0.48	ND(0.8)	ND(0.16)	ND(0.8)
	SI41-IA1 Dup	indoor air	3/21/09	0	1.5	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.16)	0.48	ND(0.79)	ND(0.16)	ND(0.79)
	SI41-IA2	indoor air	3/21/09	0	1.2	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.44	ND(0.77)	ND(0.15)	ND(0.77)
	SI41-CS1	crawlspace	3/21/09	0	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.17)	0.38	ND(0.86)	ND(0.17)	ND(0.86)
	SI41-SS1	sub slab	3/21/09	0	0.76 J	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73) J	ND(0.15)	0.5	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)
	SI41-SS1 Dup	sub slab	3/21/09	0	1.3 J	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.73)	ND(0.15)	21 J	ND(0.15)	0.52	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)
SI 42	SI42-IA	indoor air	3/16/09	0	0.93	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.18)	0.52	ND(0.88)	ND(0.18)	ND(0.88)
	SI42-IA	indoor air	1/26/10	0	ND(2.9)	ND(0.15)	ND(0.73)	ND(0.15)	ND(0.73)	ND(0.15)	ND(7.3)	ND(0.15)	ND(0.15)	0.52	ND(0.73)	ND(0.15)	ND(0.73)
	SI42-CS	crawlspace	3/16/09	0	0.94	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.17)	0.44	ND(0.83)	ND(0.17)	ND(0.83)
	SI42-CS Dup	crawlspace	3/16/09	0	1.5	ND(0.25)	ND(0.25)	ND(0.25)	ND(1.2)	ND(0.25)	ND(1.2)	ND(0.25)	ND(0.25)	0.44	ND(1.2)	ND(0.25)	ND(1.2)
	SI42-CS	crawlspace	1/26/10	0	ND(3.3)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.17)	ND(8.3)	ND(0.17)	ND(0.17)	0.48	ND(0.83)	ND(0.17)	ND(0.83)
	SI42-SS1	sub slab	3/16/09	0	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	0.81	ND(0.15)	0.32	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)
	SI42-SS1	sub slab	1/27/10	0	ND(2.9)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	ND(7.2)	ND(0.14)	0.66	ND(0.29)	ND(0.72)	ND(0.14)	ND(0.72)
	SI42-SS1 Dup	sub slab	1/27/10	0	ND(2.8)	ND(0.14)	ND(0.71)	ND(0.14)	ND(0.71)	ND(0.14)	ND(7.1)	ND(0.14)	0.65	ND(0.28)	ND(0.71)	ND(0.14)	ND(0.71)
SI 44	SI44-IA	indoor air	3/20/09	0	ND(0.86)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.86)	ND(0.17)	ND(0.86)	ND(0.17)	0.18	0.46	ND(0.86)	ND(0.17)	ND(0.86)
	SI44-IA Dup	indoor air	3/20/09	0	ND(0.72)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)	ND(0.14)	0.18	0.39	ND(0.72)	ND(0.14)	ND(0.72)
	SI44-IA	indoor air	1/24/10	0	ND(3.9)	ND(0.19)	ND(0.97)	ND(0.19)	ND(0.97)	ND(0.19)	ND(9.7)	ND(0.19)	ND(0.19)	0.53	ND(0.97)	ND(0.19)	ND(0.97)
	SI44-SS1	sub slab	3/20/09	0	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.67)	ND(0.13)	ND(0.67)
	SI44-SS1	sub slab	1/25/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	0.18	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI44-SS1 Dup	sub slab	1/25/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI44-SS2	sub slab	3/20/09	0	ND(0.69)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.14)	0.44	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)
	SI44-SS2	sub slab	1/25/10	0	ND(2.8)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	ND(7)	0.17	0.38	0.38	ND(0.7)	ND(0.14)	ND(0.7)
SI 45	SI45-IA	indoor air	3/19/09	0	1	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.88)	ND(0.18)	ND(0.18)	0.54	ND(0.88)	ND(0.18)	ND(0.88)
	SI45-IA	indoor air	1/23/10	0	14	ND(0.29)	ND(1.5)	ND(0.29)	ND(1.5)	ND(0.29)	ND(15)	ND(0.29)	ND(0.29)	1.9	ND(1.5)	ND(0.29)	ND(1.5)
	SI45-GA	garage air	3/19/09	0	1.2	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.95)	ND(0.19)	ND(0.19)	0.64	ND(0.95)	ND(0.19)	ND(0.95)
	SI45-CS	crawlspace	3/19/09	0	ND(0.8)	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.8)	ND(0.16)	ND(0.16)	0.47	ND(0.8)	ND(0.16)	ND(0.8)
	SI45-CS	crawlspace	1/23/10	0	ND(3.7)	ND(0.18)	ND(0.92)	ND(0.18)	ND(0.92)	ND(0.18)	ND(9.2)	ND(0.18)	ND(0.18)	ND(0.37)	ND(0.92)	ND(0.18)	ND(0.92)
	SI45-DP	deep probe	1/24/10	0	ND(3.1)	ND(0.16)	ND(0.78)	ND(0.16)	ND(0.78)	ND(0.16)	ND(7.8)	ND(0.16)	0.6	ND(0.31)	ND(0.78)	ND(0.16)	ND(0.78)
SI 46	SI46-IA	indoor air	3/19/09	0	2.9	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.85)	ND(0.17)	ND(0.85)	ND(0.17)	0.79	2.8	ND(0.85)	ND(0.17)	ND(0.85)
	SI46-IA	indoor air	1/28/10	0	ND(3.7)	ND(0.19)	ND(0.93)	ND(0.19)	ND(0.93)	ND(0.19)	ND(9.3)	ND(0.19)	ND(0.19)	ND(0.37)	ND(0.93)	ND(0.19)	ND(0.93)
	SI46-SS1	sub slab	3/19/09	0	1.1	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)
	SI46-SS1	sub slab	1/29/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI46-SS1 Dup	sub slab	1/29/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	ND(0.31)	ND(0.77)	ND(0.15)	ND(0.77)
	SI46-SS2	sub slab	3/19/09	0	1.2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.7)	ND(0.14)	1.6	ND(0.14)	ND(0.14)	0.49	ND(0.7)	ND(0.14)	ND(0.7)
	SI46-SS2	sub slab	1/29/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	ND(0.32)	ND(0.79)	ND(0.16)	ND(0.79)
SI 47	SI47-IA	indoor air	3/19/09	0	1.9	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	0.24	0.85	ND(0.82)	ND(0.16)	ND(0.82)
	SI47-IA	indoor air	1/28/10	0	ND(2.8)	ND(0.14)	ND(0.7)	ND(0.14)	ND(0.7)	ND(0.14)	ND(7)	ND(0.14)	0.26	0.4	ND(0.7)	ND(0.14)	ND(0.7)
	SI47-GA	garage air	3/19/09	0	2.6	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	0.75	ND(0.81)	ND(0.16)	ND(0.81)
	SI47-GA	garage air	1/28/10	0	ND(3.2)	ND(0.16)	ND(0.79)	ND(0.16)	ND(0.79)	ND(0.16)	ND(7.9)	ND(0.16)	ND(0.16)	0.49	ND(0.79)	ND(0.16)	ND(0.79)
	SI47-CS	crawlspace	3/19/09	0	1.8	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.84)	ND(0.17)	ND(0.84)	ND(0.17)	0.21	0.74	ND(0.84)	ND(0.17)	ND(0.84)
	SI47-CS	crawlspace	1/28/10	0	ND(2.7)	ND(0.14)	ND(0.69)	ND(0.14)	ND(0.69)	ND(0.14)	ND(6.9)	ND(0.14)	ND(0.14)	0.28	ND(0.69)	ND(0.14)	ND(0.69)
	SI47-SS1	sub slab	3/19/09	0	1.2	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	0.83	ND(0.14)	1.7	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)
	SI47-SS1	sub slab	1/29/10	0	ND(3)	ND(0.15)	ND(0.76)	ND(0.15)	ND(0.76)	ND(0.15)	ND(7.6)	ND(0.15)	1.4	ND(0.3)	ND(0.76)	ND(0.15)	ND(0.76)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth	Acrolein	Allyl Chloride	Benzyl-chloride	Bromo-dichloro-methane	Bromoform	Bromo-methane	Carbon Disulfide	Chloroethane	Chloroform	Chloromethane	1,2-Dibromo 3-chloro-propane	Dibromo-chloromethane	1,2-Dichloro-1,1,2,2-tetrafluoro-ethane
				(ft-bgs)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)	(ug/m³)
SI 49	SI49-IA	indoor air	3/21/09	0	0.95	ND(0.16)	ND(0.16)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.81)	ND(0.16)	ND(0.16)	0.47	ND(0.81)	ND(0.16)	ND(0.81)
	SI49-IA	indoor air	1/27/10	0	ND(3.1)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(7.7)	ND(0.15)	ND(0.15)	0.39	ND(0.77)	ND(0.15)	ND(0.77)
	SI49-CS	crawlspace	3/21/09	0	0.86	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.15)	0.37	ND(0.77)	ND(0.15)	ND(0.77)
	SI49-CS	crawlspace	1/27/10	0	ND(3.5)	ND(0.17)	ND(0.87)	ND(0.17)	ND(0.87)	ND(0.17)	ND(8.7)	ND(0.17)	ND(0.17)	0.37	ND(0.87)	ND(0.17)	ND(0.87)
SI 50	SI50-IA	indoor air	3/21/09	0	5.5	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.15)	0.67	0.57	ND(0.77)	ND(0.15)	ND(0.77)
	SI50-IA	indoor air	1/29/10	0	ND(3.3)	ND(0.17)	ND(0.83)	ND(0.17)	ND(0.83)	ND(0.17)	ND(8.3)	ND(0.17)	0.62	0.57	ND(0.83)	ND(0.17)	ND(0.83)
	SI50-SS1	sub slab	3/21/09	0	0.77	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.72)	ND(0.14)	2	ND(0.14)	0.17	ND(0.14)	ND(0.72)	ND(0.14)	ND(0.72)
	SI50-SS1	sub slab	1/29/10	0	ND(3.3)	ND(0.16)	ND(0.82)	ND(0.16)	ND(0.82)	ND(0.16)	ND(8.2)	ND(0.16)	ND(0.16)	ND(0.33)	ND(0.82)	ND(0.16)	ND(0.82)
	SI50-SS2	sub slab	3/21/09	0	ND(0.66)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.13)	1.2	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.66)	ND(0.13)	ND(0.66)
	SI50-SS2	sub slab	1/29/10	0	ND(15)	ND(0.74)	ND(3.7)	ND(0.74)	ND(3.7)	ND(0.74)	ND(37)	ND(0.74)	ND(0.74)	ND(1.5)	ND(3.7)	ND(0.74)	ND(3.7)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
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FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
Outdoor Air	OA1	outdoor air	3/14/09	0	ND(0.13)	ND(0.13)	ND(0.13)	2.3	ND(0.13)	ND(0.64)	ND(0.64)	14	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	1.2	0.6	ND(6.4)
	OA1	outdoor air	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.84)	ND(0.84)	ND(8.4)	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.17)	1.2	0.58	ND(8.4)
	OA1	outdoor air	3/16/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.2	ND(0.18)	ND(0.89)	ND(0.89)	ND(8.9)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	1.2	0.58	ND(8.9)
	OA1	outdoor air	3/17/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	0.76	ND(0.75)	ND(0.75)	ND(0.15)	1.3	0.6	ND(7.5)
	OA1	outdoor air	3/18/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.3	ND(0.15)	ND(0.73)	ND(0.73)	ND(7.3)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	1.3	0.61	ND(7.3)
	OA1	outdoor air	3/19/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.78)	ND(0.78)	ND(7.8)	1.8	ND(0.78)	ND(0.78)	ND(0.16)	1.3	0.59	ND(7.8)
	OA1	outdoor air	3/20/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.1	ND(0.19)	ND(0.97)	ND(0.97)	ND(9.7)	1.3	ND(0.97)	ND(0.97)	ND(0.19)	1.1	0.51	ND(9.7)
	OA1	outdoor air	3/21/09	0	ND(0.21)	ND(0.21)	ND(0.21)	2.3	ND(0.21)	ND(1.1)	ND(1.1)	ND(11)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.21)	1.2	0.56	ND(11)
	OA1	outdoor air	6/03/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.82)	ND(0.82)	ND(8.2)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16) J	1.1	0.5	ND(8.2)
	OA1	outdoor air	7/02/09	0	0.57	ND(0.16)	0.46	2.4	ND(0.16)	ND(0.81)	ND(0.81)	21	0.83	ND(0.81)	ND(0.81)	ND(0.32)	1.4	0.65	ND(8.1)
	OA2	outdoor air	3/14/09	0	ND(0.22)	ND(0.22)	ND(0.22)	2.2	ND(0.22)	ND(1.1)	ND(1.1)	ND(11)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.22)	1.2	0.55	ND(11)
	OA2	outdoor air	3/15/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	1.2	0.57	ND(7.5)
	OA2	outdoor air	3/16/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.1	ND(0.19)	ND(0.96)	ND(0.96)	ND(9.6)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.19)	1.1	0.51	ND(9.6)
	OA2	outdoor air	3/17/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	1.3	0.62	ND(7.7)
	OA2	outdoor air	3/18/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.82)	ND(0.82)	ND(8.2)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	1.3	0.63	ND(8.2)
	OA2	outdoor air	3/19/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	1.2	0.51	ND(7.7)
	OA2	outdoor air	3/20/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.2	ND(0.19)	ND(0.95)	ND(0.95)	ND(9.5)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	1.2	0.56	23
	OA2	outdoor air	3/21/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.4	ND(0.14)	ND(0.7)	ND(0.7)	8	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	1.2	0.59	ND(7)
	OA3	outdoor air	3/14/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.78)	ND(0.78)	ND(7.8)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	1.2	0.58	ND(7.8)
	OA3	outdoor air	3/15/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	1.2	0.57	ND(7.9)
	OA3	outdoor air	3/16/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.1	ND(0.19)	ND(0.97)	ND(0.97)	19	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.19)	1.2	0.57	ND(9.7)
	OA3	outdoor air	3/17/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.87)	ND(0.87)	ND(8.7)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	1.3	0.55	ND(8.7)
	OA3	outdoor air	3/18/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.3	ND(0.14)	ND(0.69)	ND(0.69)	ND(6.9)	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14) J	1.2	0.53	ND(6.9) J
	OA3	outdoor air	3/19/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.85)	ND(0.85)	ND(8.5)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	1.2	0.53	ND(8.5)
	OA3	outdoor air	3/20/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.1	ND(0.19)	ND(0.96)	ND(0.96)	ND(9.6)	ND(0.96)	ND(0.96)	ND(0.96)	ND(0.19)	1.1	0.49	19
	OA3	outdoor air	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.78)	ND(0.78)	ND(7.8)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	1.2	0.56	ND(7.8)
	OA4	outdoor air	1/23/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.2	0.56	ND(7.7)
	OA4	outdoor air	1/24/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.8	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.4	0.6	ND(7.9)
	OA4	outdoor air	1/25/10	0	ND(0.12)	ND(0.12)	ND(0.12)	2.7	ND(0.12)	ND(0.6)	ND(0.6)	ND(6)	ND(0.6)	ND(0.6)	ND(0.6)	ND(0.6)	1.4	0.58	ND(6)
	OA4	outdoor air	1/26/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.5	ND(0.14)	ND(0.72)	ND(0.72)	ND(7.2)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	1.3	0.54	12
	OA4	outdoor air	1/27/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.6	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	1.3	0.57	ND(7.5)
	OA4	outdoor air	1/28/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.6	ND(0.18)	ND(0.89)	ND(0.89)	13	ND(0.89) J	ND(0.89)	ND(0.89)	ND(0.89)	1.3	0.56	ND(8.9)
	OA4	outdoor air	1/29/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.2	0.52	ND(7.9)
	OA4	outdoor air	1/30/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.6	ND(0.14)	ND(0.7)	ND(0.7)	ND(7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	1.3	0.57	ND(7)
	OA4	outdoor air	2/01/10	0	ND(0.18)	ND(0.18)	0.19	2.3	ND(0.18)	ND(0.89)	ND(0.89)	ND(8.9)	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	1.3	0.54	ND(8.9)
SI 01	SI1-IA	indoor air	3/18/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.85)	ND(0.85)	1800	3.7	ND(0.85)	ND(0.85)	ND(0.17)	6.1	0.6	ND(8.5)
	SI1-IA	indoor air	1/28/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.4	ND(0.18)	ND(0.89)	ND(0.89)	1200	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	5.6	0.52	17
	SI1-GA	garage air	3/18/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.77)	ND(0.77)	32	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	1.4	0.63	ND(7.7)
	SI1-GA	garage air	1/28/10	0	ND(0.13)	ND(0.13)	ND(0.13)	2.5	ND(0.13)	ND(0.64)	ND(0.64)	60	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.64)	1.6	0.54	ND(6.4)
	SI1-CS	crawlspace	3/18/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.5	ND(0.17)	ND(0.84)	ND(0.84)	250	2.9	ND(0.84)	ND(0.84)	ND(0.17)	5.7	0.61	ND(8.4)
	SI1-CS	crawlspace	1/28/10	0	ND(0.17)	0.2	0.26	2.5	ND(0.17)	ND(0.84)	ND(0.84)	59	ND(0.84)	ND(0.84)	ND(0.84)	ND(0.84)	3.9	0.57	ND(8.4)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 03	SI3-IA1	indoor air	3/15/09	0	ND(0.5)	ND(0.5)	5.3	ND(2.5)	ND(0.5)	ND(2.5)	ND(2.5)	2400	13	ND(2.5)	7.8	ND(0.5)	1.2	ND(0.5)	ND(25)
	SI3-IA1	indoor air	6/03/09	0	ND(0.17)	ND(0.17)	4.8	2.2	ND(0.17)	ND(0.85)	ND(0.85)	850	5	ND(0.85)	6.5	ND(0.17) J	1.1	0.49	ND(8.5)
	SI3-IA1	indoor air	7/02/09	0	0.33	ND(0.2)	8.8	2.5	ND(0.2)	ND(0.98)	ND(0.98)	570	7.3	ND(0.98)	12	ND(0.39)	1.4	0.65	ND(9.8)
	SI3-IA1	indoor air	1/25/10	0	ND(0.18)	ND(0.18)	7.6	2.6	ND(0.18)	ND(0.89)	ND(0.89)	930	30	ND(0.89)	38	ND(0.89)	1.5	0.61	ND(8.9)
	SI3-IA1	indoor air	9/25/10	0	ND(0.17)	ND(0.17)	8.5	2.1	0.17 J	ND(0.85)	ND(0.85)	730	6.3	ND(0.85)	15	ND(0.85)	1.2	0.49	10 J
	SI3-IA1	indoor air	12/03/10	0	ND(0.17)	ND(0.17)	8.4	2.2	ND(0.17)	ND(0.85)	ND(0.85)	860	69	ND(0.85)	8.5	ND(0.85)	1.2	0.48	ND(8.5) J
	SI3-IA1	indoor air	4/12/11	0	ND(0.17)	ND(0.17)	6.6	2.2	ND(0.17)	ND(0.86)	ND(0.86)	630	14	ND(0.86)	6.3	ND(0.86)	1.2	0.5	ND(8.6)
	SI3-IA1 Dup	indoor air	2/09/12	0	ND(0.19)	ND(0.19)	5.7	2.4	ND(0.19)	ND(0.94)	ND(0.94)	500	12	ND(1.9)	4.4	ND(0.94)	1.2	0.57	ND(9.4)
	SI3-IA1	indoor air	2/09/12	0	ND(0.18)	ND(0.18)	6.3	2.5	ND(0.18)	ND(0.91)	ND(0.91)	530	14	ND(1.8)	4.6	ND(0.91)	1.2	0.55	ND(9.1)
	SI3-IA2	indoor air	3/15/09	0	ND(0.56)	ND(0.56)	13	ND(2.8)	ND(0.56)	ND(2.8)	ND(2.8)	3000	32	ND(2.8)	14	ND(0.56)	1.5	0.72	ND(28)
	SI3-IA2	indoor air	6/03/09	0	ND(0.14)	ND(0.14)	2.3	2.1	ND(0.14)	ND(0.72)	ND(0.72)	640	4.1	ND(0.72)	7.7	ND(0.14) J	1.1	0.51	ND(7.2)
	SI3-IA2	indoor air	7/02/09	0	0.2	ND(0.15)	4.5	2.6	ND(0.15)	ND(0.76)	ND(0.76)	540	6.7	ND(0.76)	15	ND(0.3)	1.3	0.66	ND(7.6)
	SI3-IA2	indoor air	9/25/10	0	ND(0.17)	ND(0.17)	4.8	2.1	ND(0.17) J	ND(0.83)	ND(0.83)	400	3	ND(0.83)	27	ND(0.83)	1.2	0.46	ND(8.3) J
	SI3-IA2	indoor air	12/03/10	0	ND(0.25)	ND(0.25)	6.5	2.2	ND(0.25)	ND(1.2)	ND(1.2)	760	39	ND(1.2)	6.9	ND(1.2)	1.2	0.48	ND(12) J
	SI3-IA2	indoor air	2/09/12	0	ND(0.18)	ND(0.18)	11	2.4	ND(0.18)	ND(0.88)	ND(0.88)	790	21	ND(1.8)	6	ND(0.88)	1.3	0.58	ND(8.8)
	SI3-GA	garage air	3/15/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.2	ND(0.18)	ND(0.89)	ND(0.89)	13	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.18)	1.1	0.56	ND(8.9)
	SI3-GA	garage air	6/03/09	0	ND(2)	ND(2)	ND(2)	ND(9.9)	ND(2)	ND(9.9)	ND(9.9)	ND(99)	40	ND(9.9)	2100	ND(2) J	ND(2)	ND(2)	ND(99)
	SI3-GA	garage air	7/02/09	0	ND(0.18)	ND(0.18)	0.36	2	ND(0.18)	ND(0.89)	ND(0.89)	22	33	ND(0.89)	1100	ND(0.35)	1.1	0.52	ND(8.9)
	SI3-GA	garage air	1/25/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.82)	ND(0.82)	ND(8.2)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.3	0.55	ND(8.2)
	SI3-GA	garage air	9/25/10	0	ND(0.13)	ND(0.13)	ND(0.13)	2.1	ND(0.13) J	ND(0.64)	ND(0.64)	7	ND(0.64)	ND(0.64)	4	ND(0.64)	1.1	0.49	ND(6.4) J
	SI3-GA	garage air	12/03/10	0	ND(0.15)	ND(0.15)	0.22	2.2	ND(0.15)	ND(0.75)	ND(0.75)	66	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	1.1	0.5	ND(7.5) J
	SI3-GA	garage air	4/12/11	0	ND(0.16)	ND(0.16)	0.24	2.7	ND(0.16)	ND(0.78)	ND(0.78)	28	12	ND(0.78)	ND(0.78)	ND(0.78)	1.3	0.6	ND(7.8)
	SI3-GA	garage air	2/09/12	0	ND(0.15)	ND(0.15)	0.28	2.5	ND(0.15)	ND(0.77)	ND(0.77)	21	ND(0.77)	ND(1.5)	ND(0.77)	ND(0.77)	1.2	0.59	ND(7.7)
	SI3-SS1	sub slab	3/16/09	0	ND(0.61)	ND(0.61)	ND(0.61)	ND(3.1)	ND(0.61)	ND(3.1)	ND(3.1)	36	ND(3.1)	ND(3.1)	ND(3.1)	ND(0.61)	1.2	ND(0.61)	ND(31) J
	SI3-SS1	sub slab	6/02/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.2	ND(0.18)	ND(0.91)	ND(0.91)	15	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18) J	1	0.46	ND(9.1)
	SI3-SS1	sub slab	7/02/09	0	ND(0.17)	ND(0.17)	3.1	2.3	ND(0.17)	ND(0.85)	ND(0.85)	560	4.3	ND(0.85)	17	ND(0.34)	1.4	0.67	12
	SI3-SS1	sub slab	1/26/10	0	ND(0.16)	ND(0.16)	4.8	2.6	ND(0.16)	ND(0.82)	ND(0.82)	610	13	ND(0.82)	24	ND(0.82)	1.4	0.55	ND(8.2)
	SI3-SS1	sub slab	9/25/10	0	ND(0.2)	ND(0.2)	3.1	2.1	ND(0.2) J	ND(0.98)	ND(0.98)	320	4.2	ND(0.98)	25	ND(0.98)	1.2	0.5	ND(9.8) J
	SI3-SS1	sub slab	12/02/10	0	ND(0.16)	ND(0.16)	4.3	2.6	ND(0.16)	ND(0.82)	ND(0.82)	530	8.4	ND(0.82)	5.9	ND(0.82)	1.4	0.59	ND(8.2) J
	SI3-SS1	sub slab	4/11/11	0	ND(0.17)	ND(0.17)	3.6	2.7	ND(0.17)	ND(0.85)	ND(0.85)	49	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.4	0.57	ND(8.5)
	SI3-SS1	sub slab	2/09/12	0	ND(0.17)	ND(0.17)	3.3	2.4	ND(0.17)	ND(0.84)	ND(0.84)	340	6.6	ND(1.7)	4.2	ND(0.84)	1.2	0.56	ND(8.4)
	SI3-SS2	sub slab	3/16/09	0	ND(0.58)	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	ND(2.9)	ND(2.9)	120	ND(2.9)	ND(2.9)	ND(2.9)	ND(0.58)	1.4	0.61	ND(29) J
	SI3-SS2	sub slab	6/02/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.87)	ND(0.87)	ND(8.7)	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17) J	1.1	0.48	ND(8.7)
	SI3-SS2	sub slab	7/02/09	0	0.88	ND(0.16)	2.6	2.5	ND(0.16)	ND(0.81)	ND(0.81)	ND(8.1)	0.95	ND(0.81)	ND(0.81)	ND(0.32)	1.4	0.65	ND(8.1)
	SI3-SS2	sub slab	1/26/10	0	ND(0.16)	ND(0.16)	1.7	2.5	ND(0.16)	ND(0.82)	ND(0.82)	82	0.83	ND(0.82)	ND(0.82)	ND(0.82)	1.3	0.55	ND(8.2)
	SI3-SS2	sub slab	9/25/10	0	ND(0.16)	ND(0.16)	1.7	2	ND(0.16) J	ND(0.79)	ND(0.79)	16	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.1	0.47	ND(7.9) J
	SI3-SS2	sub slab	12/02/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.2	ND(0.19)	ND(0.95)	ND(0.95)	26	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.95)	1.2	0.48	ND(9.5) J
	SI3-SS2	sub slab	4/11/11	0	ND(0.48)	ND(0.48)	6.5	ND(2.4)	ND(0.48)	ND(2.4)	ND(2.4)	740	11	ND(2.4)	6.6	ND(2.4)	1.1	0.5	ND(24)
	SI3-SS2	sub slab	2/09/12	0	ND(0.16)	ND(0.16)	3.1	2.5	ND(0.16)	ND(0.79)	ND(0.79)	24	ND(0.79)	ND(1.6)	ND(0.79)	ND(0.79)	1.3	0.55	ND(7.9)
	SIOAH3	outdoor air	9/25/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.1	ND(0.17) J	ND(0.85)	ND(0.85)	ND(8.5)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.1	0.5	ND(8.5) J
	SIOAH3	outdoor air	12/03/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.82)	ND(0.82)	8.8	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1.1	0.51	ND(8.2) J
	SIOAH3	outdoor air	4/12/11	0	ND(0.18)	ND(0.18)	ND(0.18)	2.8	ND(0.18)	ND(0.9)	ND(0.9)	ND(9)	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	1.3	0.6	ND(9)
	SI3-NS	near slab	3/19/09	6.5	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	1.3	0.54	ND(7.5)
	SI3-NS	near slab	3/19/09	11.5	ND(7100)	ND(7100)	ND(7100)	ND(35000)	ND(7100)	ND(35000)	ND(35000)	ND(350000)	ND(35000)	ND(35000)	ND(35000)	ND(7100)	ND(7100)	ND(7100)	ND(350000) J

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 03 cont.	SI3-NS Dup	near slab	3/19/09	11.5	ND(7200)	ND(7200)	ND(7200)	ND(36000)	ND(7200)	ND(36000)	ND(36000)	ND(360000)	ND(36000)	ND(36000)	ND(36000)	ND(7200)	ND(7200)	ND(7200)	ND(360000) J
	SI3-NS	near slab	9/24/10	6.5	ND(85)	ND(85)	ND(85)	ND(430)	ND(85) J	ND(430)	ND(430)	ND(4300)	ND(430)	ND(430)	ND(430)	ND(430)	ND(85)	ND(85)	ND(4300) J
	SI3-NS	near slab	9/24/10	11.5	ND(8000)	ND(8000)	ND(8000)	ND(40000)	ND(8000) J	ND(40000)	ND(40000)	ND(400000)	ND(40000)	ND(40000)	ND(40000)	ND(40000)	ND(8000)	ND(8000)	ND(400000) J
	SI3-NS	near slab	12/02/10	6.5	ND(0.43)	ND(0.43)	ND(0.43)	ND(2.2)	ND(0.43)	ND(2.2)	ND(2.2)	ND(22)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	1.2	ND(0.43)	ND(22) J
	SI3-NS	near slab	12/02/10	11.5	ND(3200)	ND(3200)	ND(3200)	ND(16000)	ND(3200)	ND(16000)	ND(16000)	ND(160000)	ND(16000)	ND(16000)	ND(16000)	ND(16000)	ND(3200)	ND(3200)	ND(160000) J
	SI3-NS	near slab	4/11/11	6.5	ND(0.41)	ND(0.41)	ND(0.41)	2.8	ND(0.41)	ND(2)	ND(2)	ND(20)	ND(2)	ND(2)	ND(2)	ND(2)	1.3	0.55	ND(20)
	SI3-NS	near slab	4/11/11	11.5	ND(5600)	ND(5600)	ND(5600)	ND(28000)	ND(5600)	ND(28000)	ND(28000)	ND(280000)	ND(28000)	ND(28000)	ND(28000)	ND(28000)	ND(5600)	ND(5600)	ND(280000)
	SI3-NS	near slab	2/08/12	6.5	ND(0.42)	ND(0.42)	ND(0.42)	2.4	ND(0.42)	ND(2.1)	ND(2.1)	ND(21)	ND(2.1)	ND(4.2)	ND(2.1)	ND(2.1)	1.3	0.55	ND(21)
	SI3-NS	near slab	2/08/12	11.5	ND(11000)	ND(11000)	ND(11000)	ND(56000)	ND(11000)	ND(56000)	ND(56000)	ND(560000)	ND(56000)	ND(110000)	ND(56000)	ND(56000)	ND(11000)	ND(11000)	ND(560000)
	SI3-FF	indoor air	1/25/10	0	ND(0.19)	ND(0.19)	8.5	2.5	ND(0.19)	ND(0.95)	ND(0.95)	980	23	ND(0.95)	35	ND(0.95)	1.4	0.58	ND(9.5)
SI 04	SI4-IA	indoor air	3/15/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.82)	ND(0.82)	1500	17 J	ND(0.82)	6	ND(0.16)	1.8	0.62	ND(8.2)
	SI4-IA Dup	indoor air	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.7	ND(0.17)	ND(0.86)	ND(0.86)	1400	11 J	ND(0.86)	6.2	ND(0.17)	2	0.7	ND(8.6)
	SI4-IA	indoor air	1/23/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.85)	ND(0.85)	1700	20	ND(0.85)	6.1	ND(0.85)	1.5	0.6	ND(8.5)
	SI4-GA	garage air	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.8	ND(0.17)	ND(0.86)	ND(0.86)	170	1.1	ND(0.86)	1.4	ND(0.17)	1.9	1.3	ND(8.6)
	SI4-GA	garage air	1/23/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.84)	ND(0.84)	280	4.7	ND(0.84)	2.8	ND(0.84)	1.9	0.56	ND(8.4)
	SI4-SS1	sub slab	3/15/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.76)	ND(0.76)	79	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.15)	1.5	0.63	ND(7.6)
	SI4-SS1	sub slab	1/24/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.3	ND(0.15)	ND(0.77)	ND(0.77)	14	1	ND(0.77)	ND(0.77)	ND(0.77)	1.2	0.52	ND(7.7)
	SI4-SS2	sub slab	3/15/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.8	ND(0.14)	ND(0.71)	ND(0.71)	250	1	ND(0.71)	ND(0.71)	ND(0.14)	2.2	0.81	ND(7.1)
	SI4-SS2	sub slab	1/24/10	0	ND(0.16)	ND(0.16)	0.17	2.5	ND(0.16)	ND(0.79)	ND(0.79)	72	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.6	0.66	ND(7.9)
SI 06	SI6-IA	indoor air	3/18/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.5	ND(0.17)	ND(0.87)	ND(0.87)	500	5.4 J	ND(0.87)	0.92	ND(0.17) J	1.5	0.56	ND(8.7) J
	SI6-IA Dup	indoor air	3/18/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.7	ND(0.17)	ND(0.85)	ND(0.85)	530	ND(0.85) J	ND(0.85)	ND(0.85)	ND(0.17) J	1.7	0.68	ND(8.5) J
	SI6-SS1	sub slab	3/18/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.5	ND(0.14)	ND(0.69)	ND(0.69)	10	ND(0.69)	ND(0.69)	ND(0.69)	ND(0.14) J	1.3	0.61	ND(6.9) J
	SI6-SS2	sub slab	3/18/09	0	ND(0.13)	ND(0.13)	ND(0.13)	2.5	ND(0.13)	ND(0.67)	ND(0.67)	ND(6.7)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13) J	1.3	0.58	ND(6.7) J
SI 07	SI7-IA	indoor air	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.75)	ND(0.75)	120	6.3	ND(0.75)	ND(0.75)	0.25	1.2	0.45	ND(7.5)
	SI7-IA	indoor air	1/23/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.5	ND(0.19)	ND(0.97)	ND(0.97)	160	1.6	ND(0.97)	ND(0.97)	ND(0.97)	1.2	0.58	ND(9.7)
	SI7-GA	garage air	3/21/09	0	ND(0.21)	ND(0.21)	ND(0.21)	2.4	ND(0.21)	ND(1)	ND(1)	19	ND(1)	ND(1)	ND(1)	ND(0.21)	1.4	0.55	ND(10)
	SI7-GA	garage air	1/23/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.81)	ND(0.81)	28	0.92	ND(0.81)	ND(0.81)	ND(0.81)	1.3	0.56	ND(8.1)
	SI7-SS1	sub slab	3/22/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.1	ND(0.14)	ND(0.71)	ND(0.71)	ND(7.1)	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	1.1	0.53	ND(7.1)
	SI7-SS1	sub slab	1/24/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.3	ND(0.17)	ND(0.84)	ND(0.84)	30	2.7	ND(0.84)	ND(0.84)	ND(0.84)	1.2	0.55	ND(8.4)
	SI7-SS2	sub slab	3/22/09	0	ND(0.13)	ND(0.13)	ND(0.13)	2.3	ND(0.13)	ND(0.67)	ND(0.67)	ND(6.7)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	1.1	0.56	ND(6.7)
	SI7-SS2	sub slab	1/24/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.3	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	1.1	0.53	ND(7.5)
SI 08	SI8-IA	indoor air	3/17/09	0	ND(0.16)	ND(0.16)	0.17	2.3	ND(0.16)	ND(0.82)	ND(0.82)	770	7.9	ND(0.82)	2.4	0.17	1.5	0.54	ND(8.2) J
	SI8-IA	indoor air	1/25/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.75)	ND(0.75)	14	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	1.3	0.58	ND(7.5)
	SI8-CS	crawlspace	3/17/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.8)	ND(0.8)	370	5.1	ND(0.8)	1.2	ND(0.16)	1.4	0.55	ND(8) J
	SI8-CS	crawlspace	1/25/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.6	ND(0.19)	ND(0.97)	ND(0.97)	ND(9.7)	ND(0.97)	ND(0.97)	ND(0.97)	ND(0.97)	1.4	0.54	ND(9.7)
	SI8-SS1	sub slab	3/17/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.1	ND(0.14)	ND(0.71)	ND(0.71)	22	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.14)	1	0.47	ND(7.1)
	SI8-SS1	sub slab	1/26/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.74)	ND(0.74)	ND(7.4)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	1	0.44	ND(7.4)
SI 09	SI9-IA	indoor air	3/21/09	0	ND(0.18)	ND(0.18)	4.6	2.1	ND(0.18)	ND(0.9)	ND(0.9)	580	21	ND(0.9)	5.5	ND(0.18)	1.3	0.55	ND(9)
	SI9-IA	indoor air	2/01/10	0	ND(0.16)	ND(0.16)	5.1	2.2	ND(0.16)	ND(0.82)	ND(0.82)	610	10	ND(0.82)	3.6	ND(0.82)	1.2	0.52	ND(8.2)
	SI9-CS	crawlspace	3/21/09	0	ND(0.14)	ND(0.14)	4.3	2.1	ND(0.14)	ND(0.7)	ND(0.7)	850	8.3	ND(0.7)	1.7	ND(0.14)	1.2	0.57	ND(7)
	SI9-CS	crawlspace	2/01/10	0	ND(0.18)	ND(0.18)	2.3	2.2	ND(0.18)	ND(0.88)	ND(0.88)	210	ND(0.88)	ND(0.88)	ND(0.88)	ND(0.88)	1.2	0.52	ND(8.8)
	SI9-DP	deep probe	3/21/09	0	ND(0.15)	ND(0.15)	0.2	1.7	ND(0.15)	ND(0.77)	ND(0.77)	17	4	ND(0.77)	1.2	0.23	1	0.42	ND(7.7)
	SI9-SS1	sub slab	3/21/09	0	ND(0.13)	ND(0.13)	0.23	2	ND(0.13)	ND(0.66)	ND(0.66)	390	2	ND(0.66)	ND(0.66)	ND(0.13)	1.1	0.5	ND(6.6)
	SI9-SS1	sub slab	1/30/10	0	ND(0.16)	ND(0.16)	0.17	2.5	ND(0.16)	ND(0.82)	ND(0.82)	420	1.6	ND(0.82)	ND(0.82)	ND(0.82)	1.3	0.51	ND(8.2)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 10	SI10-IA	indoor air	3/17/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.78)	ND(0.78)	330 J	2.3	ND(0.78)	ND(0.78)	ND(0.16)	1.4	0.63	ND(7.8) J
	SI10-IA	indoor air	12/08/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.85)	ND(0.85)	9	ND(0.85)	ND(1.7)	ND(0.85)	ND(0.85)	1.4	0.6	ND(8.5)
	SI10-CS	crawlspace	3/17/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.5	ND(0.17)	ND(0.87)	ND(0.87)	11 J	1.1	ND(0.87)	ND(0.87)	ND(0.17)	1.3	0.62	ND(8.7) J
	SI10-CS	crawlspace	2/01/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.3	ND(0.15)	ND(0.73)	ND(0.73)	ND(7.3)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.73)	1.2	0.55	ND(7.3)
	SI10-SS1	sub slab	3/17/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.4	ND(0.14)	ND(0.72)	ND(0.72)	13	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	1.2	0.59	ND(7.2)
	SI10-SS1	sub slab	12/07/09	0	ND(2.1)	ND(2.1)	ND(2.1)	ND(11)	ND(2.1)	ND(11)	ND(11)	ND(110)	ND(11)	ND(21)	ND(11)	ND(11)	ND(2.1)	ND(2.1)	ND(110)
	SI10-SS1	sub slab	3/30/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.3	ND(0.17)	ND(0.86)	ND(0.86)	ND(8.6)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	1.3	0.55	ND(8.6)
	SI10-SS1	sub slab	4/23/10	0	ND(0.2)	ND(0.2)	ND(0.2)	2.3	ND(0.2)	ND(1)	ND(1)	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	1.2	0.53	ND(10)
	SI10-SS2	sub slab	3/17/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.5	ND(0.19)	ND(0.94)	ND(0.94)	ND(9.4)	ND(0.94)	ND(0.94)	ND(0.94)	ND(0.19) J	1.2	0.59	ND(9.4) J
	SI10-SS2	sub slab	12/09/09	0	ND(2.3)	ND(2.3)	ND(2.3)	ND(11)	ND(2.3)	ND(11)	ND(11)	ND(110)	ND(11)	ND(23)	ND(11)	ND(11)	ND(2.3)	ND(2.3)	ND(110)
	SI10-SS2	sub slab	3/30/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.8)	ND(0.8)	ND(8)	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.8)	1.2	0.57	ND(8)
	SI10-SS2	sub slab	4/23/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.3	ND(0.18)	ND(0.91)	ND(0.91)	39	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	1.3	0.58	ND(9.1)
	SI10-CS1	crawlspace	1/30/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	1.8	ND(0.79)	ND(0.79)	ND(0.79)	1.1	0.54	ND(7.9)
	SI10-NS	near slab	12/09/09	4.3	ND(0.96)	ND(0.96)	ND(0.96)	ND(4.8)	ND(0.96)	ND(4.8)	ND(4.8)	ND(48)	ND(4.8)	ND(9.6)	ND(4.8)	ND(4.8)	1.1	ND(0.96)	ND(48)
	SI10-NS	near slab	12/09/09	8.3	ND(7.7)	ND(7.7)	ND(7.7)	ND(38)	ND(7.7)	ND(38)	ND(38)	ND(380)	ND(38)	ND(77)	ND(38)	ND(38)	ND(7.7)	ND(7.7)	ND(380)
	SI10-NS	near slab	1/26/10	8.3	ND(0.47)	ND(0.47)	ND(0.47)	2.5	ND(0.47)	ND(2.4)	ND(2.4)	ND(24)	ND(2.4)	ND(2.4)	ND(2.4)	ND(2.4)	1.2	ND(0.47)	ND(24)
	SI10-NS	near slab	1/26/10	13.3	ND(0.6)	ND(0.6)	ND(0.6)	ND(3)	ND(0.6)	ND(3)	ND(3)	ND(30)	ND(3)	ND(3)	ND(3)	ND(3)	2.3	ND(0.6)	ND(30)
	SI10-NS	near slab	1/27/10	4.3	ND(0.55)	ND(0.55)	ND(0.55)	ND(2.8)	ND(0.55)	ND(2.8)	ND(2.8)	ND(28)	ND(2.8)	ND(2.8)	ND(2.8)	ND(2.8)	1.2	ND(0.55)	ND(28)
	SI10-NS	near slab	3/29/10	4.3	1.6	ND(0.54)	ND(0.54)	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	ND(27)	4.4	ND(2.7)	ND(2.7)	ND(2.7)	1.3	0.66	ND(27)
	SI10-NS	near slab	3/29/10	8.3	ND(0.54)	ND(0.54)	ND(0.54)	ND(2.7)	ND(0.54)	ND(2.7)	ND(2.7)	57	27	ND(2.7)	ND(2.7)	ND(2.7)	1.8	0.61	ND(27)
	SI10-NS	near slab	3/29/10	13.3	1.3	ND(0.58)	ND(0.58)	ND(2.9)	ND(0.58)	ND(2.9)	ND(2.9)	ND(29)	19	ND(2.9)	ND(2.9)	ND(2.9)	1.1	1.5	ND(29)
	SI10-NS	near slab	4/23/10	4.3	0.52	ND(0.46)	ND(0.46)	2.4	ND(0.46)	ND(2.3)	ND(2.3)	ND(23)	3.5	ND(2.3)	ND(2.3)	ND(2.3)	1.4	0.57	ND(23)
	SI10-NS	near slab	4/23/10	8.3	ND(0.6)	ND(0.6)	ND(0.6)	ND(3)	ND(0.6)	ND(3)	ND(3)	ND(30)	ND(3)	ND(3)	ND(3)	ND(3)	1.7	ND(0.6)	ND(30)
	SI10-NS	near slab	4/23/10	13.3	ND(0.42)	ND(0.42)	ND(0.42)	ND(2.1)	ND(0.42)	ND(2.1)	ND(2.1)	ND(21)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	1.1	ND(0.42)	ND(21)
	SI10-OA	outdoor air	12/08/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.3	ND(0.14)	ND(0.72)	ND(0.72)	ND(7.2)	ND(0.72)	ND(1.4)	ND(0.72)	ND(0.72)	1.2	0.53	ND(7.2)
	SI10-SS3	sub slab	1/26/10	0	0.34	ND(0.16)	0.29	2.6	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.3	0.56	ND(7.9)
	SI10-SS3	sub slab	4/23/10	0	ND(0.21)	ND(0.21)	ND(0.21)	2.4	ND(0.21)	ND(1)	ND(1)	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	1.2	0.53	ND(10)
	SI10-SS4	sub slab	1/26/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.7	ND(0.15)	ND(0.74)	ND(0.74)	ND(7.4)	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	1.3	0.57	ND(7.4)
SI 12	SI12-IA	indoor air	3/14/09	0	ND(0.21)	ND(0.21)	ND(0.21)	2.2	ND(0.21)	ND(1.1)	ND(1.1)	350	8.1	ND(1.1)	1.6	ND(0.21)	1.4	0.48	ND(11)
	SI12-IA	indoor air	1/27/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.79)	ND(0.79)	270	7.8	ND(0.79)	ND(0.79)	ND(0.79)	1.6	0.52	13
	SI12-CS	crawlspace	3/14/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.79)	ND(0.79)	8.5	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	1.2	0.55	ND(7.9)
	SI12-CS	crawlspace	1/27/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.74)	ND(0.74)	8.3	ND(0.74)	ND(0.74)	ND(0.74)	ND(0.74)	1.3	0.55	ND(7.4)
SI 13	SI13-IA	indoor air	3/18/09	0	ND(0.45)	ND(0.45)	ND(0.45)	2.6	ND(0.45)	ND(2.2)	ND(2.2)	2200	19	ND(2.2)	16	ND(0.45) J	1.5	0.6	ND(22) J
	SI13-IA	indoor air	1/24/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.7	ND(0.18)	ND(0.92)	ND(0.92)	1900	36	ND(0.92)	13	ND(0.92)	1.6	0.53	ND(9.2)
	SI13-GA	garage air	3/18/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.1	ND(0.19)	ND(0.93)	ND(0.93)	120	1	ND(0.93)	ND(0.93)	0.27	1.6	0.5	ND(9.3)
	SI13-GA	garage air	1/24/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.86)	ND(0.86)	430	12	ND(0.86)	4	ND(0.86)	2.6	0.57	ND(8.6)
	SI13-SS1	sub slab	3/18/09	0	ND(0.15)	ND(0.15)	0.16	8.7	ND(0.15)	ND(0.75)	ND(0.75)	180	1.1	ND(0.75)	ND(0.75)	ND(0.15) J	6.9	0.6	ND(7.5) J
	SI13-SS1	sub slab	1/25/10	0	ND(0.16)	ND(0.16)	ND(0.16)	3.3	ND(0.16)	ND(0.82)	ND(0.82)	12	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	9.5	0.53	ND(8.2)
	SI13-SS2	sub slab	3/18/09	0	ND(0.14)	ND(0.14)	ND(0.14)	8.1	ND(0.14)	ND(0.71)	ND(0.71)	140	1.2	ND(0.71)	ND(0.71)	ND(0.14) J	8.9	0.52	ND(7.1) J
	SI13-SS2	sub slab	1/25/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.8)	ND(0.8)	160	1.1	ND(0.8)	ND(0.8)	ND(0.8)	3.6	0.51	ND(8)
	SI13-SS2 Dup	sub slab	1/25/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.9	ND(0.16)	ND(0.81)	ND(0.81)	200	0.88	ND(0.81)	ND(0.81)	ND(0.81)	4.3	0.54	ND(8.1)
SI 14	SI14-IA	indoor air	3/16/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.3	ND(0.18)	ND(0.91)	ND(0.91)	19	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	1.3	0.57	ND(9.1)
	SI14-SS1	sub slab	3/16/09	0	ND(0.13)	ND(0.13)	0.29	2.5	ND(0.13)	ND(0.67)	ND(0.67)	ND(6.7)	1	ND(0.67)	ND(0.67)	ND(0.13)	1.5	0.63	ND(6.7)
	SI14-SS2	sub slab	3/16/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	0.17	1.2	0.52	ND(7.5)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 23	SI23-IA	indoor air	3/17/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.74)	ND(0.74)	500 J	22	ND(0.74)	3.4	ND(0.15)	1.6	0.61	ND(7.4) J
	SI23-IA	indoor air	1/27/10	0	ND(0.2)	ND(0.2)	ND(0.2)	2.6	ND(0.2)	ND(0.99)	ND(0.99)	240	6.2 J	ND(0.99)	1.9	ND(0.99)	1.4	0.56	ND(9.9)
	SI23-GA	garage air	3/17/09	0	ND(0.13)	ND(0.13)	ND(0.13)	2.3	ND(0.13)	ND(0.64)	ND(0.64)	47 J	1.3	ND(0.64)	ND(0.64)	ND(0.13)	1.5	0.58	ND(6.4) J
	SI23-GA	garage air	1/27/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.79)	ND(0.79)	16	ND(0.79) J	ND(0.79)	ND(0.79)	ND(0.79)	2	0.55	ND(7.9)
	SI23-CS	crawlspace	3/17/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9) J	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	1.3	0.58	ND(7.9) J
	SI23-CS	crawlspace	1/27/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.85)	ND(0.85)	ND(8.5)	ND(0.85) J	ND(0.85)	ND(0.85)	ND(0.85)	1.5	0.56	ND(8.5)
	SI23-DP	deep probe	3/17/09	0	ND(0.2)	ND(0.2)	ND(0.2)	2.5	ND(0.2)	ND(0.98)	ND(0.98)	12	48	ND(0.98)	28	ND(0.2)	1	0.45	ND(9.8)
	SI23-DP	deep probe	1/28/10	0	ND(0.13)	ND(0.13)	ND(0.13)	4	ND(0.13)	ND(0.67)	ND(0.67)	ND(6.7)	1 J	ND(0.67)	ND(0.67)	ND(0.67)	0.34	ND(0.13)	ND(6.7)
	SI23-SS1	sub slab	3/17/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.2	ND(0.14)	ND(0.72)	ND(0.72)	ND(7.2)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	1.1	0.53	ND(7.2)
	SI23-SS1 Dup	sub slab	3/17/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.2	ND(0.14)	ND(0.72)	ND(0.72)	ND(7.2)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	1.1	0.53	ND(7.2)
SI 24	SI24-IA	indoor air	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.77)	ND(0.77)	27	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	1.1	0.47	ND(7.7)
	SI24-IA	indoor air	1/29/10	0	ND(0.11)	ND(0.11)	ND(0.11)	2	ND(0.11)	ND(0.56)	ND(0.56)	9.8	ND(0.56)	ND(0.56)	2.3	ND(0.56)	1	0.43 J	ND(5.6)
	SI24-IA Dup	indoor air	1/29/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.3	ND(0.17)	ND(0.84)	ND(0.84)	12	ND(0.84)	ND(0.84)	2.8	ND(0.84)	1.2	0.57 J	ND(8.4)
	SI24-SS1	sub slab	3/22/09	0	ND(0.13)	ND(0.13)	0.14	2.7	ND(0.13)	ND(0.64)	ND(0.64)	ND(6.4)	ND(0.64)	ND(0.64)	ND(0.64)	ND(0.13)	1.1	0.55	ND(6.4)
	SI24-SS1 Dup	sub slab	3/22/09	0	ND(0.13)	ND(0.13)	0.13	2.6	ND(0.13)	ND(0.65)	ND(0.65)	ND(6.5)	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.13)	1.2	0.52	ND(6.5)
	SI24-SS1	sub slab	1/30/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.5	ND(0.14)	ND(0.68)	ND(0.68)	ND(6.8)	ND(0.68)	ND(0.68)	ND(0.68)	ND(0.68)	1.1	0.48	ND(6.8)
	SI24-SS2	sub slab	3/22/09	0	ND(0.13)	ND(0.13)	ND(0.13)	2.6	ND(0.13)	ND(0.66)	ND(0.66)	ND(6.6)	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.13)	1.1	0.51	ND(6.6)
	SI24-SS2	sub slab	1/30/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.7	ND(0.16)	ND(0.78)	ND(0.78)	ND(7.8)	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	1.1	0.44	ND(7.8)
SI 25	SI25-IA	indoor air	3/14/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.1	ND(0.16)	ND(0.82)	ND(0.82)	470	6.9	ND(0.82)	1.3	ND(0.16)	2.1	0.58	ND(8.2)
	SI25-IA	indoor air	1/24/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.82)	ND(0.82)	120	0.99	ND(0.82)	ND(0.82)	ND(0.82)	2	0.56	ND(8.2)
	SI25-IA Dup	indoor air	1/24/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.7	ND(0.17)	ND(0.85)	ND(0.85)	110	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	2	0.57	ND(8.5)
	SI25-GA	garage air	3/14/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.2	ND(0.18)	ND(0.89)	ND(0.89)	130	3.2	ND(0.89)	1.8	ND(0.18)	2.5	0.55	ND(8.9)
	SI25-GA	garage air	1/24/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.79)	ND(0.79)	100	1.2	ND(0.79)	1.2	ND(0.79)	2.4	0.61	ND(7.9)
	SI25-CS	crawlspace	3/14/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.3	ND(0.14)	ND(0.72)	ND(0.72)	54	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	1.3	0.55	ND(7.2)
	SI25-CS	crawlspace	1/24/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.78)	ND(0.78)	11	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.78)	1.4	0.58	ND(7.8)
	SI25-SS1	sub slab	3/14/09	0	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(28)	ND(28)	ND(280)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(280)
	SI25-SS1 Dup	sub slab	3/14/09	0	ND(5.6)	ND(5.6)	ND(5.6)	ND(28)	ND(5.6)	ND(28)	ND(28)	ND(280)	ND(28)	ND(28)	ND(28)	ND(5.6)	ND(5.6)	ND(5.6)	ND(280)
	SI25-SS1	sub slab	1/26/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.77)	ND(0.77)	22 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.4	0.48	ND(7.7)
	SI25-SS1 Dup	sub slab	1/26/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.77)	ND(0.77)	8.4 J	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.4	0.49	ND(7.7)
SI 26	SI26-IA	indoor air	3/14/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.78)	ND(0.78)	29	ND(0.78)	ND(0.78)	ND(0.78)	ND(0.16)	1.2	0.56	ND(7.8)
	SI26-CS	crawlspace	3/14/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.3	ND(0.18)	ND(0.91)	ND(0.91)	11	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.18)	1.2	0.55	ND(9.1)
SI 27	SI27-IA	indoor air	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.7	ND(0.17)	ND(0.86)	ND(0.86)	ND(8.6)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	1.5	0.72	ND(8.6)
	SI27-CS	crawlspace	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.3	ND(0.17)	ND(0.85)	ND(0.85)	ND(8.5)	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.17)	1.3	0.58	ND(8.5)
SI 28	SI28-FFA	indoor air	3/20/09	0	ND(0.16)	ND(0.16)	ND(0.16)	1.9	ND(0.16)	ND(0.79)	ND(0.79)	830	17	ND(0.79)	8.2	ND(0.16)	2.5	0.51	ND(7.9)
	SI28-IA	indoor air	3/20/09	0	ND(0.16)	ND(0.16)	ND(0.16)	1.9	ND(0.16)	ND(0.78)	ND(0.78)	510	3.4	ND(0.78)	4	ND(0.16)	3.7	0.49	ND(7.8)
	SI28-IA	indoor air	1/27/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.6	ND(0.15)	ND(0.77)	ND(0.77)	390	2.7	ND(0.77)	1.3	ND(0.77)	2.8	0.58	ND(7.7)
	SI28-GA	garage air	3/20/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.78)	ND(0.78)	11	0.81	ND(0.78)	ND(0.78)	ND(0.16)	1.2	0.56	ND(7.8)
	SI28-GA	garage air	1/27/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.6	ND(0.15)	ND(0.76)	ND(0.76)	16	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	1.4	0.57	ND(7.6)
	SI28-SS1	sub slab	3/20/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.3	ND(0.15)	ND(0.73)	ND(0.73)	65	1.5	ND(0.73)	0.87	ND(0.15)	1.2	0.49	ND(7.3)
	SI28-SS1	sub slab	1/28/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.79)	ND(0.79)	41	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.2	0.47	ND(7.9)
	SI28-SS1 Dup	sub slab	1/28/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.79)	ND(0.79)	40	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.2	0.46	ND(7.9)
	SI28-SS2	sub slab	3/20/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.1	ND(0.14)	ND(0.69)	ND(0.69)	53	ND(0.69)	ND(0.69)	0.69	ND(0.14)	0.94	0.41	ND(6.9)
	SI28-SS2	sub slab	1/28/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.7	ND(0.15)	ND(0.76)	ND(0.76)	30	ND(0.76)	ND(0.76)	ND(0.76)	ND(0.76)	1.2	0.51	ND(7.6)
	SI28-NS	near slab	3/20/09	15	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.73)	ND(0.73)	ND(7.3)	ND(0.73)	ND(0.73)	9.9	ND(0.15)	0.16	0.16	ND(7.3)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 28 cont.	SI28-NS	near slab	3/20/09	25	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.77)	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	3.9	ND(0.77)	110	ND(0.15)	ND(0.15)	ND(0.15)	ND(7.7)
	SI28-NS	near slab	3/21/09	5	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.74)	ND(0.74)	300	2	ND(0.74)	24	ND(0.15)	0.95	0.52	ND(7.4)
	SI28-NS	near slab	3/21/09	10	ND(0.18)	ND(0.18)	ND(0.18)	2.2	ND(0.18)	ND(0.92)	ND(0.92)	130	6.5	ND(0.92)	230	ND(0.18)	0.96	0.72	ND(9.2)
	SI28-NS	near slab	3/21/09	20	ND(0.29)	ND(0.29)	ND(0.29)	ND(1.4)	ND(0.29)	ND(1.4)	ND(1.4)	25	19	ND(1.4)	820	ND(0.29)	1.2	1.1	ND(14)
	SI28-FF	indoor air	1/27/10	0	ND(0.21)	ND(0.21)	ND(0.21)	2.4	ND(0.21)	ND(1.1)	ND(1.1)	370	1.5	ND(1.1)	1.2	ND(1.1)	2.6	0.53	ND(11)
SI 29	SI29-IA	indoor air	3/15/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.73)	ND(0.73)	ND(7.3)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	1.6	0.64	ND(7.3)
	SI29-IA	indoor air	1/25/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.7	ND(0.15)	ND(0.77)	ND(0.77)	300	26	ND(0.77)	1.2	ND(0.77)	2.6	0.57	ND(7.7)
	SI29-CS	crawlspace	3/15/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.73)	ND(0.73)	12	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	2	0.75	ND(7.3)
	SI29-CS	crawlspace	1/25/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.6	ND(0.18)	ND(0.92)	ND(0.92)	85	3.1	ND(0.92)	ND(0.92)	ND(0.92)	2.6	0.57	ND(9.2)
SI 30	SI30-IA	indoor air	3/16/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.84)	ND(0.84)	19	2.6 J	ND(0.84)	1.1	ND(0.17)	1.2	0.53	ND(8.4)
	SI30-IA Dup	indoor air	3/16/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.3	ND(0.18)	ND(0.9)	ND(0.9)	17	1.4 J	ND(0.9)	1.1	ND(0.18)	1.2	0.51	ND(9)
	SI30-IA	indoor air	1/23/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.5	ND(0.18)	ND(0.91)	ND(0.91)	51	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	1.3	0.57	ND(9.1)
	SI30-SS1	sub slab	3/16/09	0	ND(0.14)	ND(0.14)	ND(0.14)	3	ND(0.14)	ND(0.69)	ND(0.69)	240	1.1	ND(0.69)	0.69	ND(0.14)	1.6	0.64	ND(6.9)
	SI30-SS2	sub slab	3/16/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.6	ND(0.14)	ND(0.68)	ND(0.68)	ND(6.8)	ND(0.68)	ND(0.68)	ND(0.68)	ND(0.14)	1.5	0.66	ND(6.8)
	SI30-SS2 Dup	sub slab	3/16/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.6	ND(0.14)	ND(0.69)	ND(0.69)	17	1.2	ND(0.69)	ND(0.69)	ND(0.14)	1.3	0.66	ND(6.9)
SI 31	SI31-IA	indoor air	3/14/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.1	ND(0.19)	ND(0.97)	ND(0.97)	310	15	ND(0.97)	2	ND(0.19)	4.1	0.55	ND(9.7)
	SI31-IA	indoor air	1/28/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.5	ND(0.19)	ND(0.95)	ND(0.95)	840	160 J	ND(0.95)	3	ND(0.95)	3.6	0.52	ND(9.5)
	SI31-CS	crawlspace	3/14/09	0	ND(0.17)	ND(0.17)	0.2	2.2	ND(0.17)	ND(0.85)	ND(0.85)	380	17	ND(0.85)	2.6	ND(0.17)	3.5	0.53	ND(8.5)
	SI31-CS	crawlspace	1/28/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.5	ND(0.19)	ND(0.93)	ND(0.93)	320	41 J	ND(0.93)	2	ND(0.93)	2.8	0.57	ND(9.3)
	SI31-SS1	sub slab	3/14/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.75)	ND(0.75)	8.1	0.85	ND(0.75)	ND(0.75)	ND(0.15)	3	0.55	ND(7.5)
	SI31-SS1	sub slab	1/29/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.87)	ND(0.87)	11	ND(0.87) J	ND(0.87)	ND(0.87)	ND(0.87)	3.6	0.49	ND(8.7)
	SI31-SS1 Dup	sub slab	1/29/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.5	ND(0.17)	ND(0.87)	ND(0.87)	11	ND(0.87) J	ND(0.87)	ND(0.87)	ND(0.87)	3.6	0.49	ND(8.7)
	SI31-SS2	sub slab	3/14/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.4	ND(0.14)	ND(0.72)	ND(0.72)	ND(7.2)	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	2.4	0.56	ND(7.2)
	SI31-SS2	sub slab	1/29/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.78)	ND(0.78)	ND(7.8)	ND(0.78) J	ND(0.78)	ND(0.78)	ND(0.78)	4	0.5	ND(7.8)
SI 32	SI32-IA	indoor air	3/18/09	0	ND(0.52)	ND(0.52)	ND(0.52)	2.7	ND(0.52)	ND(2.6)	ND(2.6)	1300	21	ND(2.6)	ND(2.6)	ND(0.52)	2.4	0.7	ND(26)
	SI32-IA	indoor air	1/27/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.6	ND(0.19)	ND(0.95)	ND(0.95)	1300	9 J	ND(0.95)	ND(0.95)	ND(0.95)	1.6	0.55	ND(9.5)
	SI32-CS	crawlspace	3/18/09	0	ND(0.22)	ND(0.22)	ND(0.22)	2.2	ND(0.22)	ND(1.1)	ND(1.1)	ND(11)	ND(1.1)	ND(1.1)	ND(1.1)	ND(0.22) J	1.2	0.54	ND(11) J
	SI32-CS	crawlspace	1/27/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.87)	ND(0.87)	ND(8.7)	ND(0.87) J	ND(0.87)	ND(0.87)	ND(0.87)	1.3	0.55	ND(8.7)
	SI32-DP	deep probe	3/18/09	0	ND(0.14) J	ND(0.14)	ND(0.14)	2.4	ND(0.14)	ND(0.71)	ND(0.71)	ND(7.1)	6.2 J	ND(0.71)	3.8	ND(0.14) J	1.2	0.57 J	ND(7.1) J
	SI32-DP Dup	deep probe	3/18/09	0	0.41 J	ND(0.14)	ND(0.14)	2.3	ND(0.14)	ND(0.71)	ND(0.71)	ND(7.1)	4.5 J	ND(0.71)	3.6	ND(0.14) J	1.2	0.74 J	ND(7.1) J
	SI32-DP	deep probe	1/28/10	0	ND(0.3)	ND(0.3)	ND(0.3)	2.6	ND(0.3)	ND(1.5)	ND(1.5)	ND(15)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	1.3	0.57	ND(15)
	SI32-DP Dup	deep probe	1/28/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.5	ND(0.18)	ND(0.91)	ND(0.91)	ND(9.1)	ND(0.91)	ND(0.91)	ND(0.91)	ND(0.91)	1.3	0.55	ND(9.1)
SI 33	SI33-IA	indoor air	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.87)	ND(0.87)	2300	12	ND(0.87)	3.4	ND(0.17)	1.5	0.72	ND(8.7)
	SI33-IA	indoor air	1/23/10	0	0.16	ND(0.13)	0.14	2.4	ND(0.13)	ND(0.67)	ND(0.67)	620	76	ND(0.67)	2	ND(0.67)	1.3	0.59	ND(6.7)
	SI33-CS	crawlspace	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.87)	ND(0.87)	320	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.17)	1.2	0.58	ND(8.7)
	SI33-CS	crawlspace	1/23/10	0	ND(0.19)	ND(0.19)	ND(0.19)	2.4	ND(0.19)	ND(0.93)	ND(0.93)	120	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.93)	1.2	0.58	ND(9.3)
	SI33-GA	garage air	1/23/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.87)	ND(0.87)	250	18	ND(0.87)	ND(0.87)	ND(0.87)	1.6	0.62	ND(8.7)
SI 34	SI34-IA	indoor air	3/14/09	0	ND(0.19)	ND(0.19)	4.9	2.5	ND(0.19)	ND(0.96)	ND(0.96)	120	2.8	ND(0.96)	ND(0.96)	ND(0.19)	1.6	0.56	ND(9.6)
	SI34-CS	crawlspace	3/14/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2	ND(0.16)	ND(0.82)	ND(0.82)	ND(8.2)	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.16)	1.1	0.48	ND(8.2)
	SI34-CS Dup	crawlspace	3/14/09	0	ND(0.13)	ND(0.13)	0.14	2.5	ND(0.13)	ND(0.64)	ND(0.64)	ND(6.4)	1.1	ND(0.64)	0.9	ND(0.13)	1.3	0.57	ND(6.4) J
	SI34-DP	deep probe	3/14/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.82)	ND(0.82)	ND(8.2)	1.7	ND(0.82)	38	ND(0.16)	1.4	0.63	ND(8.2)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 35	SI35-IA	indoor air	3/15/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.7	ND(0.17)	ND(0.86)	ND(0.86)	70	1.1	ND(0.86)	ND(0.86)	ND(0.17)	8.2	0.76	ND(8.6)
	SI35-IA	indoor air	1/26/10	0	ND(0.16)	ND(0.16)	ND(0.16)	3.5	ND(0.16)	ND(0.81)	ND(0.81)	75	1.6	ND(0.81)	ND(0.81)	ND(0.81)	4.6	0.76	ND(8.1)
	SI35-GA	garage air	3/15/09	0	ND(0.16)	ND(0.16)	ND(0.16)	3	ND(0.16)	ND(0.8)	ND(0.8)	14	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	3.6	0.66	ND(8)
	SI35-GA	garage air	1/26/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.8	ND(0.15)	ND(0.75)	ND(0.75)	ND(7.5)	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.75)	3.6	0.54	ND(7.5)
	SI35-SS1	sub slab	3/15/09	0	ND(0.13)	ND(0.13)	ND(0.13)	3.2	ND(0.13)	ND(0.66)	ND(0.66)	6.7	2.1	ND(0.66)	ND(0.66)	ND(0.13)	25	0.6	ND(6.6)
	SI35-SS1	sub slab	1/27/10	0	ND(0.24)	ND(0.24)	ND(0.24)	3	ND(0.24)	ND(1.2)	ND(1.2)	18	ND(1.2)	ND(1.2)	ND(1.2)	ND(1.2)	25	0.51	12
	SI35-SS2	sub slab	3/15/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.4	ND(0.14)	ND(0.7)	ND(0.7)	12	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	42	0.57	ND(7)
	SI35-SS2	sub slab	1/27/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.7	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	33	0.47	ND(7.7)
SI 36	SI36-IA	indoor air	3/17/09	0	ND(0.19)	ND(0.19)	0.25	5.1	ND(0.19)	ND(0.93)	ND(0.93)	2700 J	38	ND(0.93)	5.5	0.21	4.6	0.62	ND(9.3) J
	SI36-IA	indoor air	1/26/10	0	ND(0.19)	ND(0.19)	ND(0.19)	3	ND(0.19)	ND(0.94)	ND(0.94)	330	12	ND(0.94)	2.1	ND(0.94)	2	0.58	ND(9.4)
	SI36-CS	crawlspace	3/17/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.7	ND(0.14)	ND(0.72)	ND(0.72)	24	1.4	ND(0.72)	ND(0.72)	ND(0.14)	2	0.61	ND(7.2) J
	SI36-CS	crawlspace	1/26/10	0	ND(0.13)	ND(0.13)	ND(0.13)	2.7	ND(0.13)	ND(0.65)	ND(0.65)	ND(6.5)	1.1	ND(0.65)	ND(0.65)	ND(0.65)	1.9	0.58	ND(6.5)
SI 37	SI37-IA	indoor air	3/17/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.82)	ND(0.82)	60	3.9	ND(0.82)	ND(0.82)	ND(0.16)	1.6	0.6	ND(8.2) J
	SI37-IA	indoor air	1/26/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.86)	ND(0.86)	11	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.86)	1.4	0.56	ND(8.6)
	SI37-SS1	sub slab	3/17/09	0	ND(0.13)	ND(0.13)	ND(0.13)	3.3	ND(0.13)	ND(0.65)	ND(0.65)	11	ND(0.65)	ND(0.65)	ND(0.65)	ND(0.13)	1.4	0.51	ND(6.5) J
	SI37-SS1	sub slab	1/27/10	0	ND(0.31)	ND(0.31)	ND(0.31)	2.3	ND(0.31)	ND(1.5)	ND(1.5)	ND(15)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	1.1	0.39	ND(15)
	SI37-SS1 Dup	sub slab	1/27/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.79)	1.2	0.44	ND(7.9)
	SI37-SS2	sub slab	3/17/09	0	ND(0.14)	ND(0.14)	ND(0.14)	3.4	ND(0.14)	ND(0.7)	ND(0.7)	ND(7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.14)	1.2	0.27	ND(7) J
SI 38	SI38-IA	indoor air	3/17/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.5	ND(0.18)	ND(0.92)	ND(0.92)	1500	6.1	ND(0.92)	ND(0.92)	ND(0.18)	1.4	0.71	ND(9.2) J
	SI38-IA	indoor air	1/25/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.85)	ND(0.85)	480	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.4	0.68	24
	SI38-CS	crawlspace	3/17/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.79)	ND(0.79)	8	ND(0.79)	ND(0.79)	ND(0.79)	ND(0.16)	1.3	0.61	ND(7.9) J
	SI38-CS Dup	crawlspace	3/17/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.86)	ND(0.86)	ND(8.6) J	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	1.2	0.53	ND(8.6) J
	SI38-CS	crawlspace	1/25/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.5	ND(0.18)	ND(0.89)	ND(0.89)	11	ND(0.89)	ND(0.89)	ND(0.89)	ND(0.89)	1.3	0.53	ND(8.9)
SI 39	SI39-IA	indoor air	3/19/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.4	ND(0.17)	ND(0.85)	ND(0.85)	300	24	ND(0.85)	2.5	ND(0.17)	2.4	0.54	ND(8.5)
	SI39-IA Dup	indoor air	3/19/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.3	ND(0.18)	ND(0.9)	ND(0.9)	300	21	ND(0.9)	2.5	ND(0.18)	2.4	0.62	ND(9)
	SI39-IA	indoor air	1/24/10	0	ND(0.17)	0.2	0.36	2.7	ND(0.17)	ND(0.83)	ND(0.83)	110	5.9	ND(0.83)	ND(0.83)	ND(0.83)	2.3	0.59	ND(8.3)
	SI39-SS1	sub slab	3/19/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.1	ND(0.15)	ND(0.75)	ND(0.75)	61	1.4	ND(0.75)	ND(0.75)	ND(0.15)	1.6	0.53	ND(7.5)
	SI39-SS1	sub slab	1/25/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.77)	ND(0.77)	29	0.78	ND(0.77)	20	ND(0.77)	1.9	0.51	ND(7.7)
	SI39-SS2	sub slab	3/19/09	0	ND(0.15)	ND(0.15)	ND(0.15)	1.9	ND(0.15)	ND(0.75)	ND(0.75)	27	ND(0.75)	ND(0.75)	ND(0.75)	ND(0.15)	1.5	0.47	ND(7.5)
	SI39-SS2	sub slab	1/25/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.83)	ND(0.83)	ND(8.3)	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	1.9	0.51	ND(8.3)
SI 40	SI40-IA1	indoor air	3/21/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.2	ND(0.19)	ND(0.93)	ND(0.93)	40	ND(0.93)	ND(0.93)	ND(0.93)	ND(0.19)	1.2	0.57	ND(9.3)
	SI40-IA1	indoor air	2/01/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.5	ND(0.18)	ND(0.9)	ND(0.9)	91	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	1.3	0.57	ND(9)
	SI40-IA2	indoor air	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.79)	ND(0.79)	160	5.3	ND(0.79)	0.79	ND(0.16)	1.2	0.58	ND(7.9)
	SI40-IA2	indoor air	2/01/10	0	ND(0.17)	ND(0.17)	0.36	2.9	ND(0.17)	ND(0.85)	ND(0.85)	260	ND(0.85)	ND(0.85)	ND(0.85)	ND(0.85)	1.6	0.55	ND(8.5)
	SI40-IA3	indoor air	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.8)	ND(0.8)	270	4.2	ND(0.8)	ND(0.8)	ND(0.16)	1.5	0.59	ND(8)
	SI40-IA3	indoor air	2/01/10	0	ND(0.14)	ND(0.14)	0.27	22	ND(0.14)	ND(0.71)	ND(0.71)	1100	5.5	ND(0.71)	ND(0.71)	ND(0.71)	9.1	0.58	ND(7.1)
	SI40-CS1	crawlspace	3/21/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2	ND(0.17)	ND(0.87)	ND(0.87)	18	1.5 J	ND(0.87)	ND(0.87)	ND(0.17)	1.1	0.47	ND(8.7)
	SI40-CS1 Dup	crawlspace	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.82)	ND(0.82)	14	2.2 J	ND(0.82)	ND(0.82)	ND(0.16)	1.3	0.56	ND(8.2)
	SI40-CS1	crawlspace	2/01/10	0	ND(0.19)	ND(0.19)	0.26	2.6	ND(0.19)	ND(0.96)	ND(0.96)	110	2.8	ND(0.96)	ND(0.96)	ND(0.96)	1.5	0.55	ND(9.6)
	SI40-CS1 Dup	crawlspace	2/01/10	0	ND(0.19)	ND(0.19)	0.23	2.7	ND(0.19)	ND(0.97)	ND(0.97)	110	3.4	ND(0.97)	ND(0.97)	ND(0.97)	1.5	0.56	ND(9.7)
	SI40-CS2	crawlspace	3/21/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.1	ND(0.17)	ND(0.85)	ND(0.85)	35	3.1	ND(0.85)	ND(0.85)	ND(0.17)	1.2	0.56	ND(8.5)
	SI40-CS2	crawlspace	2/01/10	0	ND(0.18)	ND(0.18)	0.22	4.6	ND(0.18)	ND(0.92)	ND(0.92)	94	2.2	ND(0.92)	ND(0.92)	ND(0.92)	2.1	0.56	ND(9.2)
	SI40-SS1	sub slab	3/21/09	0	ND(0.16)	ND(0.16)	0.23	2.3	ND(0.16)	ND(0.8)	ND(0.8)	24	ND(0.8)	ND(0.8)	ND(0.8)	ND(0.16)	1.3	0.49	ND(8)
	SI40-SS1	sub slab	1/30/10	0	ND(0.35)	ND(0.35)	ND(0.35)	4.3	ND(0.35)	ND(1.7)	ND(1.7)	ND(17)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)	2.1	0.55	ND(17)
	SI40-SS1 Dup	sub slab	1/30/10	0	ND(0.17)	ND(0.17)	ND(0.17)	4.3	ND(0.17)	ND(0.87)	ND(0.87)	8.8	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	2.1	0.53	ND(8.7)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 41	SI41-IA1	indoor air	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.8)	ND(0.8)	96	2.2 J	ND(0.8)	ND(0.8)	ND(0.16)	1.3	0.57	ND(8)
	SI41-IA1 Dup	indoor air	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.79)	ND(0.79)	110	2.9 J	ND(0.79)	ND(0.79)	ND(0.16)	1.3	0.56	ND(7.9)
	SI41-IA2	indoor air	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.77)	ND(0.77)	47	3.6	ND(0.77)	0.97	ND(0.15)	1.3	0.61	ND(7.7)
	SI41-CS1	crawlspace	3/21/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.1	ND(0.17)	ND(0.86)	ND(0.86)	ND(8.6)	ND(0.86)	ND(0.86)	ND(0.86)	ND(0.17)	1.2	0.6	ND(8.6)
	SI41-SS1	sub slab	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	1.8	ND(0.15)	ND(0.73)	ND(0.73)	ND(7.3)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	1	0.51	ND(7.3)
	SI41-SS1 Dup	sub slab	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	1.9	ND(0.15)	ND(0.73)	ND(0.73)	ND(7.3)	ND(0.73)	ND(0.73)	ND(0.73)	ND(0.15)	1.1	0.52	ND(7.3)
SI 42	SI42-IA	indoor air	3/16/09	0	ND(0.18)	ND(0.18)	0.22	2.2	ND(0.18)	ND(0.88)	ND(0.88)	180	5.1	ND(0.88)	1.1	ND(0.18)	1.5	0.55	ND(8.8)
	SI42-IA	indoor air	1/26/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.73)	ND(0.73)	130	3.3	ND(0.73)	ND(0.73)	ND(0.73)	1.6	0.54	ND(7.3)
	SI42-CS	crawlspace	3/16/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.83)	ND(0.83)	85	1.7 J	ND(0.83)	ND(0.83)	ND(0.17)	1.3	0.57	ND(8.3)
	SI42-CS Dup	crawlspace	3/16/09	0	ND(0.25)	ND(0.25)	ND(0.25)	2.2	ND(0.25)	ND(1.2)	ND(1.2)	97	ND(1.2) J	ND(1.2)	ND(1.2)	ND(0.25)	1.3	0.54	ND(12)
	SI42-CS	crawlspace	1/26/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.5	ND(0.17)	ND(0.83)	ND(0.83)	43	ND(0.83)	ND(0.83)	ND(0.83)	ND(0.83)	1.4	0.55	9.1
	SI42-SS1	sub slab	3/16/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.4	ND(0.15)	ND(0.76)	ND(0.76)	ND(7.6)	1.1	ND(0.76)	ND(0.76)	ND(0.15)	1.3	0.58	ND(7.6) J
	SI42-SS1	sub slab	1/27/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.5	ND(0.14)	ND(0.72)	ND(0.72)	7.7	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.72)	1.3	0.58	ND(7.2)
	SI42-SS1 Dup	sub slab	1/27/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.5	ND(0.14)	ND(0.71)	ND(0.71)	7.9	ND(0.71)	ND(0.71)	ND(0.71)	ND(0.71)	1.3	0.55	ND(7.1)
SI 44	SI44-IA	indoor air	3/20/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.86)	ND(0.86)	180	2	ND(0.86)	ND(0.86)	ND(0.17)	1.9	0.59	ND(8.6)
	SI44-IA Dup	indoor air	3/20/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2	ND(0.14)	ND(0.72)	ND(0.72)	170	1.9	ND(0.72)	ND(0.72)	ND(0.14)	1.7	0.52	ND(7.2)
	SI44-IA	indoor air	1/24/10	0	ND(0.19)	ND(0.19)	0.28	3	ND(0.19)	ND(0.97)	ND(0.97)	42	1.4	ND(0.97)	ND(0.97)	ND(0.97)	1.9	0.62	ND(9.7)
	SI44-SS1	sub slab	3/20/09	0	ND(0.13)	ND(0.13)	ND(0.13)	1.8	ND(0.13)	ND(0.67)	ND(0.67)	ND(6.7)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.13)	0.97	0.48	ND(6.7)
	SI44-SS1	sub slab	1/25/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.7	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.2	0.49	ND(7.7)
	SI44-SS1 Dup	sub slab	1/25/10	0	ND(0.15)	ND(0.15)	0.24	2.7	ND(0.15)	ND(0.77)	ND(0.77)	ND(7.7)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.2	0.52	ND(7.7)
	SI44-SS2	sub slab	3/20/09	0	ND(0.14)	ND(0.14)	ND(0.14)	1.9	ND(0.14)	ND(0.69)	ND(0.69)	ND(6.9)	ND(0.69)	ND(0.69)	0.76	ND(0.14)	1.1	0.48	ND(6.9)
	SI44-SS2	sub slab	1/25/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.5	ND(0.14)	ND(0.7)	ND(0.7)	11	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	1.1	0.45	ND(7)
SI 45	SI45-IA	indoor air	3/19/09	0	ND(0.18)	ND(0.18)	ND(0.18)	2.2	ND(0.18)	ND(0.88)	ND(0.88)	69	2.5	ND(0.88)	ND(0.88)	ND(0.18)	1.2	0.52	ND(8.8)
	SI45-IA	indoor air	1/23/10	0	ND(0.29)	ND(0.29)	ND(0.29)	2.3	ND(0.29)	ND(1.5)	ND(1.5)	1300	5.4	ND(1.5)	14	ND(1.5)	1.2	0.56	ND(15)
	SI45-GA	garage air	3/19/09	0	ND(0.19)	ND(0.19)	ND(0.19)	2.4	ND(0.19)	ND(0.95)	ND(0.95)	ND(9.5)	ND(0.95)	ND(0.95)	ND(0.95)	ND(0.19)	1.3	0.6	ND(9.5)
	SI45-CS	crawlspace	3/19/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.8)	ND(0.8)	ND(8)	0.94	ND(0.8)	ND(0.8)	ND(0.16)	1.3	0.59	ND(8)
	SI45-CS	crawlspace	1/23/10	0	ND(0.18)	ND(0.18)	ND(0.18)	2.5	ND(0.18)	ND(0.92)	ND(0.92)	24	ND(0.92)	ND(0.92)	ND(0.92)	ND(0.92)	1.2	0.55	ND(9.2)
	SI45-DP	deep probe	1/24/10	0	ND(0.16)	ND(0.16)	ND(0.16)	10	ND(0.16)	ND(0.78)	ND(0.78)	ND(7.8)	10	ND(0.78)	1	ND(0.78)	1.2	0.58	ND(7.8)
SI 46	SI46-IA	indoor air	3/19/09	0	ND(0.17)	ND(0.17)	1.4	2.6	ND(0.17)	ND(0.85)	ND(0.85)	290	15	ND(0.85)	10	ND(0.17)	20	0.59	ND(8.5)
	SI46-IA	indoor air	1/28/10	0	ND(0.19)	ND(0.19)	0.28	2.6	ND(0.19)	ND(0.93)	ND(0.93)	24	1.1 J	ND(0.93)	2	ND(0.93)	6.9	0.55	ND(9.3)
	SI46-SS1	sub slab	3/19/09	0	ND(0.15)	ND(0.15)	2.1	1.9	ND(0.15)	ND(0.76)	ND(0.76)	260	1.8	ND(0.76)	ND(0.76)	ND(0.15)	7	0.49	ND(7.6)
	SI46-SS1	sub slab	1/29/10	0	ND(0.15)	ND(0.15)	0.35	2.6	ND(0.15)	ND(0.77)	ND(0.77)	75	2.5 J	ND(0.77)	ND(0.77)	ND(0.77)	6.1	0.51	ND(7.7)
	SI46-SS1 Dup	sub slab	1/29/10	0	ND(0.15)	ND(0.15)	0.33	2.5	ND(0.15)	ND(0.77)	ND(0.77)	71	0.78 J	ND(0.77)	ND(0.77)	ND(0.77)	6.1	0.51	ND(7.7)
	SI46-SS2	sub slab	3/19/09	0	ND(0.14)	ND(0.14)	1.8	2.2	ND(0.14)	ND(0.7)	ND(0.7)	310	2.7	ND(0.7)	1	ND(0.14)	8.8	0.54	ND(7)
	SI46-SS2	sub slab	1/29/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.5	ND(0.16)	ND(0.79)	ND(0.79)	ND(7.9)	ND(0.79) J	ND(0.79)	ND(0.79)	ND(0.79)	8.9	0.52	ND(7.9)
SI 47	SI47-IA	indoor air	3/19/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.3	ND(0.16)	ND(0.82)	ND(0.82)	300	13	ND(0.82)	5.9	ND(0.16)	1.9	0.61	ND(8.2)
	SI47-IA	indoor air	1/28/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.7	ND(0.14)	ND(0.7)	ND(0.7)	220	1.5 J	ND(0.7)	ND(0.7)	ND(0.7)	1.4	0.58	ND(7)
	SI47-GA	garage air	3/19/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.2	ND(0.16)	ND(0.81)	ND(0.81)	790	11	ND(0.81)	20	ND(0.16)	5.6	0.58	ND(8.1)
	SI47-GA	garage air	1/28/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.6	ND(0.16)	ND(0.79)	ND(0.79)	13	ND(0.79) J	ND(0.79)	ND(0.79)	ND(0.79)	1.3	0.56	ND(7.9)
	SI47-CS	crawlspace	3/19/09	0	ND(0.17)	ND(0.17)	ND(0.17)	2.2	ND(0.17)	ND(0.84)	ND(0.84)	270	12	ND(0.84)	5.2	ND(0.17)	1.8	0.62	ND(8.4)
	SI47-CS	crawlspace	1/28/10	0	ND(0.14)	ND(0.14)	ND(0.14)	2.6	ND(0.14)	ND(0.69)	ND(0.69)	55	0.74 J	ND(0.69)	ND(0.69)	ND(0.69)	1.4	0.56	ND(6.9)
	SI47-SS1	sub slab	3/19/09	0	ND(0.14)	ND(0.14)	ND(0.14)	1.9	ND(0.14)	ND(0.72)	ND(0.72)	16	ND(0.72)	ND(0.72)	ND(0.72)	ND(0.14)	1.2	0.48	ND(7.2)
	SI47-SS1	sub slab	1/29/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.5	ND(0.15)	ND(0.76)	ND(0.76)	8.6	ND(0.76) J	ND(0.76)	ND(0.76)	ND(0.76)	1.2	0.5	ND(7.6)

TABLE 6.2-3. SUMMARY OF WATER TREATMENT, HOUSEHOLD CLEANING, REFRIGERANT, AND OTHER VOLATILE ORGANIC COMPOUNDS FOR VAPOR INTRUSION INVESTIGATION
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Sample Designation	Sample Type	Date Sampled	Depth (ft-bgs)	1,2-Di-chloro-benzene (ug/m³)	1,3-Di-chloro-benzene (ug/m³)	1,4-Di-chloro-benzene (ug/m³)	Dichloro-difluoro-methane (ug/m³)	1,2-Dichloro-propane (ug/m³)	Cis-1,3-dichloro-propene (ug/m³)	trans-1,3-Dichloro-propene (ug/m³)	Ethanol (ug/m³)	d-Limonene (ug/m³)	Methyl Methacrylate (ug/m³)	alpha-Pinene (ug/m³)	1,2,4-Trichloro-benzene (ug/m³)	Trichloro-fluoromethane (ug/m³)	1,1,2-Trichloro-trifluoro-ethane (ug/m³)	Vinyl Acetate (ug/m³)
SI 49	SI49-IA	indoor air	3/21/09	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.81)	ND(0.81)	53	3.3	ND(0.81)	ND(0.81)	ND(0.16)	1.5	0.83	ND(8.1)
	SI49-IA	indoor air	1/27/10	0	ND(0.15)	ND(0.15)	ND(0.15)	2.6	ND(0.15)	ND(0.77)	ND(0.77)	51	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	1.4	0.63	ND(7.7)
	SI49-CS	crawlspace	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	1.9	ND(0.15)	ND(0.77)	ND(0.77)	16	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.15)	1.1	0.55	ND(7.7)
	SI49-CS	crawlspace	1/27/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.6	ND(0.17)	ND(0.87)	ND(0.87)	18	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)	1.4	0.6	ND(8.7)
SI 50	SI50-IA	indoor air	3/21/09	0	ND(0.15)	ND(0.15)	ND(0.15)	2.2	ND(0.15)	ND(0.77)	ND(0.77)	270	8.6	ND(0.77)	10	ND(0.15)	1.3	0.59	27
	SI50-IA	indoor air	1/29/10	0	ND(0.17)	ND(0.17)	ND(0.17)	2.5	ND(0.17)	ND(0.83)	ND(0.83)	350	4.4	ND(0.83)	2.2	ND(0.83)	1.3	0.55	ND(8.3)
	SI50-SS1	sub slab	3/21/09	0	ND(0.14)	ND(0.14)	ND(0.14)	2.1	ND(0.14)	ND(0.72)	ND(0.72)	23	1.2	ND(0.72)	ND(0.72)	ND(0.14)	1.1	0.49	ND(7.2)
	SI50-SS1	sub slab	1/29/10	0	ND(0.16)	ND(0.16)	ND(0.16)	2.4	ND(0.16)	ND(0.82)	ND(0.82)	9.1	ND(0.82)	ND(0.82)	ND(0.82)	ND(0.82)	1	0.4	ND(8.2)
	SI50-SS2	sub slab	3/21/09	0	ND(0.13)	ND(0.13)	ND(0.13)	1.9	ND(0.13)	ND(0.66)	ND(0.66)	12	ND(0.66)	ND(0.66)	ND(0.66)	ND(0.13)	1	0.46	ND(6.6)
	SI50-SS2	sub slab	1/29/10	0	ND(0.74)	ND(0.74)	ND(0.74)	ND(3.7)	ND(0.74)	ND(3.7)	ND(3.7)	ND(37)	ND(3.7)	ND(3.7)	ND(3.7)	ND(3.7)	1.3	ND(0.74)	ND(37)

Notes:
J - Value is estimated
R - Value has been rejected and should not be used
ug/m^3 - micrograms per cubic meter
ft-bgs - feet below ground surface
ND - constituent not detected above reporting limit
Dup - duplicate sample

TABLE 6.3-1. SUSPECT DUMP AREA, RESEARCH RESULTS FROM THE MONTANA BOARD OF OIL AND GAS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well ID	Location	API Number	Ground Elevation (feet)	Report Type	Date(s)	Lease	Drilling Company	Additional Information
Simmes Ranch Well No. 2	990 feet from north line and 1,320 feet from west line of Section 13, T36N, R3W	25-101-23098	3,469	Completion Report	December 4, 1986 (Drilling Commenced); December 6, 1986 (Drilling Completed)	Simmes Ranch	Bluejay Resources, Inc.	Details of Work Result: Completed as a dry hole.
Simmes Ranch Well No. 2	990 feet from the north line and 1,320 feet from the west line of Section 13, T36N, R3W	25-101-23098	3,469	Completion Report	February 16, 1988	Simmes Ranch	Bluejay Resources, Inc.	Details of Work Result: Notice of intention to abandon well. 1). Plug well with 20 sacks 2). 3 sacks at surface 3). Cut casing off 3 feet below ground 4). Restore location
Well No. 1	330 feet from north line and 820 feet from west line of Section 13, T36N, R3W	25-101-23018	3,490	Subsequent Report of Abandonment	November 6, 1986	Sun Lease	Berenergy Corporation	The subject well was plugged and abandoned as follows on October 22, 1986: 1). Set CIBP at 3,520 feet 2). Set 2 sacks cement on top of CBIP (3,520-3,495 feet) 3). Set 5 sack cement surface plug (64-3 feet) 4). Cut off casing 3 feet below surface and welded on cap.
Well No. 1	330 feet from north line and 820 feet from west line of Section 13, T36N, R3W	25-101-23018	3,478	Completion Report	November 25, 1986 (Drilling Commenced); November 27, 1986 (Drilling Completed)	Simmes Ranch	KeeSun Partners/Bluejay Resources, Inc.	Details of Work Result: Completed as a dry hole.
Simmes Ranch Well No. 1	330 feet from north line and 820 feet from west line of Section 13, T36N, R3W	25-101-23018	3,478	Subsequent Report of Abandonment	February 16, 1988	Simmes Ranch	Bluejay Resources, Inc.	Details of Work Result: 1). Plugged well with 10 sacks plug on bottom 2). 3 sacks at surface 3). Cut casing off 3 feet below ground and weld on plate 4). Restored location.
Well No. 1	330 feet from north line and 820 feet from west line of Section 13, T36N, R3W	25-101-23018	3,478	Log of Well	December 27, 1985 (Drilling Commenced); January 24, 1986 (Drilling Completed)	Sun Lease	Berenergy Corporation	Details of Work Result: Well temporarily abandoned
Well No. 1	2,300 feet north of the south line and 990 feet east of east line of Section 24, T36N, R3W	101-07230	3,590	Log of Oil or Gas Well	July 22, 1942 (Drilling Commenced); May 28, 1943 (Drilling Completed)	Great Falls 078152	Washington Oil Finding Company	Details of Work Result: Plugged and Abandoned

Notes:

Simmes Ranch/Well No. 2	This well location was located in Section 13 of T36N, R3W, which is located north of the suspected dump site.
Simmes Ranch/Well No. 1	This well location was also located in Section 13 of T36N, R3W, which is located north of the suspected dump site. It also appears (as shown on the well log) that this location was also referred to as "Simmes Ranch No. 1".
Well No. 1	This well location was located in Section 24 of T36N, R3W, which is located to the southeast of the suspected dump site.

API - American Petroleum Institute
No. - Number
API Number XX-XXX-XXX - STATE-COUNTY-WELL
T36N - Township 36 North
R3W - Range 3 West
CIBP - cast iron bridge plug

TABLE 6.4-1. HISTORICAL OWNERSHIP REVIEW, SECTION 19, TOWNSHIP 36 NORTH, RANGE 2 WEST
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Record Filed As	Date of Transaction	Type of Transaction	Parties Involved (Grantor/Grantee)	Parcel/Tract Description	Pertinent Information
78-DEED-131	August 31, 1967	Deed	**Homestake Oil & Gas Company → Western Oil Transportation Company, Inc.**	A 2.62 acre tract of land in NE1/4 of NE1/4 of Sec. 19, T36N, R2W starting at a point at the NE corner of Sec. 19, T36N, R2W, then extending W at a bearing of N 89°49' W for 420', then S a bearing of N 0°5' W for 272', then E at a bearing of N 89°49'W for 420', then N 0°5' W for 272' to the point of beginning.	Deed and sale is subject to all reservations and conveyances of oil, gas, other hydrocarbons and minerals and subject to all easements bother recorded and visible.
80-MISC-92	December 1, 1980	Surface Lease	**Western Oil Transportation Company, Inc. → Outlook Energy**	A 2.62 acre tract of land in NE1/4 of NE1/4 of Sec. 19, T36N, R2W starting at a point at the NE corner of Sec. 19, T36N, R2W, then extending W at a bearing of N 89°49' W for 420', then S a bearing of N 0°5' W for 272', then E at a bearing of N 89°49'W for 420', then N 0°5' W for 272' to the point of beginning.	Month to month surface lease to Outlook Energy that the lessor grants and guarantees the lessee the right of ingress and egress to and from the property for all purposes during the term of the lease. The lessee will also be responsible to return the property to its original condition or to conditions acceptable to lessor within 90 days of expiration of lease.
62-DEED-56	May 2, 1966	Assignment of Easements	**Western Oil Transportation Company, Inc. → Darling Gathering System**	R-O-W deed transferred between Thomas & Marie McAlpine and the Darling Gathering System including the SW1/4 of the NW1/4 of SW1/4 of SE1/4 of Sec. 26 (approximately 260 rods) in T37N, R4W.	Easement in Toole County, Montana being part of the former Producer's Pipeline Company System as described in Deed Book 62, Page 56 from Thomas and Marie McAlpine (May 2, 1966).
DEED-247	January 3, 1966	Assignment of Easements	**Western Oil Transportation Company, Inc. → Darling Gathering System**	Land in S1/2 of SW1/4 of Sec. 25, T37N, R4W consisting of a strip of land 5' wide, 2.5' on each side of the center line starting at SW corner of Sec. 25, T37N, R4W, then W 2,873' along S boundary of Sec. 25, then 2,728' at a bearing of N 66°16' W to point along W boundary of Sec. 25, 1,098' N of SW corner and equal to 0.314 acre.	As recorded in Deed Book 76, Page 257 from the State of Montana (#D-5369) dated January 3, 1966. The pipeline shall be buried below plow depth as to not interfere with use and cultivation of the land. The grantee and successors shall pay any damages which may result in the crops, fences, and other property or interests of the lessee and purchasers from the State by reason of laying, maintaining, operating, or removing the said pipeline, and that the amount of damages shall be ascertained and determined by three disinterested persons.
80-MISC-251	June 18, 1981	Assignment of Easements	**Western Oil Transportation Company, Inc. → Darling Gathering System**	Includes easements to the Darling Gathering System, as follows: Purchased from Edmund & Esther Attenburg (Book 76, Page 162) October 16, 1954, Agnes Davis (Book 61, Page 219) November 1, 1954, L.B. & Gladys Delp (Book 76, Page 173), Albert & Anna Goeddertz (Book 76, Page 169), Paul & Louise Jesse (Book 76, Page 166) October 30, 1952, Paul & Louise Jesse and Herman & Margaret Simmes (Book 76, Page 167) October 30, 1952, Rudolph & Itha Juedeman (Book 76, Page 159) November 7, 1952, John & Jeanie McAlpine (Book 76, Page 163) November 6, 1952, Thomas & Marie McApline (Book 76, Page 154) November 4, 1952, Robert & Emma Rathbun (Book 76, Page 170) October 31, 1952, Herman & Margaret Simmes (Book 76, Page 178) November 27, 1965, Hilda Taule (Book 76, Page 158) October 3, 1952, **The Texas Company (Book 55, Page 105) September 18, 1953**, Vincent & Lidya Vargo (Book 76, Page 157) October 2, 1952, and J.A. & Frances Wing (Book 67, Page 168) October 31, 1952.	This assignment of easement is in conjunction with the two abovementioned 1966 transactions and includes 15 additional tracts of land (easements) as described in the mentioned Deed Books and Pages.

TABLE 6.4-1. HISTORICAL OWNERSHIP REVIEW, SECTION 19, TOWNSHIP 36 NORTH, RANGE 2 WEST
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Record Filed As	Date of Transaction	Type of Transaction	Parties Involved (Grantor/Grantee)	Parcel/Tract Description	Pertinent Information
95-DEED-286	October 1, 1993	Special Warranty Deed	**Scurlock Permian Corporation → John Swanson**	A 2.62 acre tract of land in NE1/4 of NE1/4 of Sec. 19, T36N, R2W starting at a point at the NE corner of Sec. 19, T36N, R2W, then extending W at a bearing of N 89°49' W for 420', then S a bearing of N 0°5' W for 272', then E at a bearing of N 89°49'W for 420', then N 0°5' W for 272' to the point of beginning.	Subject to all reservations and conveyances of oil, gas, other hydrocarbons and minerals, and subject to all easements both recorded and visible. This deed is made subject to all legal highways, zoning, and building laws, ordinances and regulations, to all restrictions, easements, R-O-Ws, exceptions, reservations, and conditions contained in prior instruments of record in the chain of title to the property conveyed herby and to any state of facts which an accurate survey would show.

Title Summary:
A title search was initially performed by the *First American Title Company* of Shelby, Montana in February, 2010 for a tract of land located in Section 19, Township 36 north, and Range 2 west (said section), of Toole County, Montana. The Title Company provided a brief description of the chain of documents and copies of the historical titles obtained during the title search. The above table provides a more thorough review of the titles obtained during the initial title search. Additionally, related tracts of land are color coded for easier review of this table.

Color-Coded References:

2.62 acre tract of land located in Sec. 19 of T36N, R2W
Other information not applicable to the above coded references

Notes:
XX-CCCC-XX – Book Number-Book Type-Book Page Number
PAT – Record of Patents
MISC – miscellaneous
DEED – deed book
BOS – bill of sale
R-O-W – right-of-way
Sec. – Section
T – Township
R – Range
N – north
S – south
E – east
W - west

TABLE 7.1-1. GROUNDWATER SAMPLING WELL PRODUCTION CLASSES
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Well Production Class	Description	Approximate volume of water produced (Liters)
1	The well will sustain pumping at a rate greater than 200 milliliters per minute with little or no drop in water level	8+
2	A full sample suite can be collected with no difficulties (at least no difficulties related to the well's water supply)	8+
3	Collecting a full sample suite nearly runs the well dry OR the well runs dry just short of a full suite	7.5
4	Some sample bottles can be filled with a bailer but there is no possibility of collecting a full suite	3
5	The well is completely dry or has less than 100 milliliters of well casing volume	0

Note:

A full sample suite is approximately 7.5 liters of water based on the bottle sets used in 2011.

TABLE 7.1-2. DATA USED IN FALCON FINGERPRINTING ANALYSIS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Shallow Wells	GW-20RS	GW-NS	P2RI-16S	P2RI-18SR	P2RI-19S	P2RI-21S	P2RI-22S	P2RI-23S	P2RI-25S	P2RI-26S	P2RI-33S	P2RI-37S	P2RI-9S	GW-11	P2RI-51S
Date Sampled	5/18/2012	5/20/2012	10/26/2010	9/17/2011	10/27/2010	9/15/2011	10/26/2010	10/27/2010	10/28/2010	9/20/2011	12/7/2011	9/16/2011	10/27/2010	5/18/2012	5/17/2012
Barium, Total	0.0148 J	0.0543	0.0584 J	0.0277	0.152	0.0345 J	0.068 J	0.0751	0.0098 J	0.0206	0.227	0.018	0.0882	0.0095	0.019 J
Chromium, Total	ND(0.075)	0.0075 JB	ND(0.075)	0.0092 J	0.0125	0.007 J	0.0036 J	0.0053	ND(0.015)	0.0029 J	0.0181	0.0015 JB	0.0053	0.0019 J	0.0019 J
Cobalt, Total	0.0035 J	0.0027 J	ND(0.025)	0.0062 J	ND(0.025)	0.0066 J	0.0047 J	0.0055	0.178	0.0331	0.0057	0.005	0.0121	0.126	0.00084 J
Copper, Total	0.0286 J	0.02 JB	ND(0.05)	0.0297 JB	0.0195	0.0239 JB	0.0176	0.0119	0.0107	0.0166	0.0104 J	0.0072 J	0.0095	0.0159	0.0318
Lead, Total	0.0228 J	ND(0.015)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.075)	ND(0.015)	ND(0.015)	ND(0.075)	ND(0.015)	0.0112 J	ND(0.015)	ND(0.015)	0.0049 J	0.0027 J
Nickel, Total	0.0124 J	0.0074 J	0.0367	0.0115	0.0179	0.0559	0.0158	0.0257	0.408	0.0222 J	0.0165	0.0203	0.0327	0.342	0.006 J
Selenium, Total	0.153	0.357	0.0079 J	0.0741	0.7	0.0251	0.0851 J	0.0014	0.349	0.408 J	0.0569	0.0017 J	0.00097	0.0047 J	0.23
Zinc, Total	0.049 J	0.0467	0.212	0.0416 J	0.0431	0.0247 J	0.0237	0.58	0.512	0.0133 J	0.0699	0.0106 J	0.0209	0.206	0.0306

Deep Wells	GW-20D	GW-ND	P2RI-16D	P2RI-18D	P2RI-19D	P2RI-22D	P2RI-23D	P2RI-24D	P2RI-25D	P2RI-26D	P2RI-33D	P2RI-37D	P2RI-9D
Date Sampled	5/18/2012	5/18/2012	12/8/2011	12/8/2011	9/15/2011	9/15/2011	9/16/2011	9/16/2011	9/19/2011	9/20/2011	9/16/2011	3/20/2012	10/27/2010
Barium, Total	0.013 J	0.01 J	0.0078	0.0088 J	0.0058 J	0.016 J	0.0192	0.0445	0.016 J	0.0086	0.0088	0.0327	0.0435
Chromium, Total	ND(0.075)	ND(0.075)	0.0021 J	0.0037 J	0.0017 J	0.0021 J	0.0024 J	ND(0.015)	0.0027 J	0.003 J	ND(0.015)	0.0015 J	ND(0.015)
Cobalt, Total	0.0048 J	0.006 J	0.0057	0.0074 JB	0.0215	0.0028 J	0.0032 J	0.0031 J	0.17	0.199	0.0027 J	0.0018 J	0.0032
Copper, Total	0.0184 J	0.0128 J	0.0075 JB	0.0093 JB	0.0159 JB	0.0156 JB	0.0169	0.0055 JB	0.0256	0.0341	0.0053 J	0.0013 J	0.0041
Lead, Total	0.0151 J	0.0252 J	ND(0.015)	0.0104 JB	0.0026 JB	ND(0.015)	ND(0.015)	ND(0.015)	0.0112 J	0.0035 J	ND(0.015)	0.0074 J	ND(0.015)
Nickel, Total	0.0408	0.0329	0.0374 J	0.0249	0.102	0.0051 J	0.0144	0.0065 J	0.524	0.547 J	ND(0.01)	0.0047 J	0.0062
Selenium, Total	0.347	0.0197	0.0588 J	0.005 JB	0.194	ND(0.02)	0.0033 J	ND(0.01)	0.364	0.292 J	ND(0.01)	ND(0.002)	ND(0.004)
Zinc, Total	0.0224 J	0.0238 J	0.015 J	0.005 J	0.0237	0.0249	0.0549	0.0112 J	0.508	0.59	0.0073 J	0.0329	0.0652

Notes:

ND - Not detected (reporting limit in parentheses).

J - Estimated concentration.

JB - Estimated concentration due to blank contamination.

TABLE 7.1-3. FALCON FINGERPRINT MASS FRACTIONS AND CORRELATION COEFFICIENTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Well	GW-20D	GW-20RS	GW-ND	GW-NS	P2RI-16D	P2RI-16S	P2RI-18D	P2RI-18SR	P2RI-19D	P2RI-19S	P2RI-21S	P2RI-22D	P2RI-22S	P2RI-23D	P2RI-23S	P2RI-24D	P2RI-25D	P2RI-25S	P2RI-26D	P2RI-26S	P2RI-33D	P2RI-33S	P2RI-37D	P2RI-37S	P2RI-9D	P2RI-9S	GW-11	P2RI-51S
	Sum Metals Concentrations	0.46	0.28	0.13	0.50	0.13	0.32	0.07	0.20	0.37	0.95	0.18	0.07	0.22	0.11	0.70	0.07	1.62	1.47	1.68	0.52	0.02	0.42	0.08	0.06	0.12	0.17	0.71	0.32
Mass Fractions	Barium, Total	0.03	0.05	0.08	0.11	0.06	0.19	0.12	0.14	0.02	0.16	0.19	0.24	0.31	0.17	0.11	0.63	0.01	0.01	0.01	0.04	0.37	0.55	0.40	0.28	0.36	0.52	0.01	0.06
	Chromium, Total	0.00	0.00	0.00	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.02	0.02	0.00	0.03	0.00	0.01
	Cobalt, Total	0.01	0.01	0.05	0.01	0.04	0.00	0.10	0.03	0.06	0.00	0.04	0.04	0.02	0.03	0.01	0.04	0.10	0.12	0.12	0.06	0.11	0.01	0.02	0.08	0.03	0.07	0.18	0.00
	Copper, Total	0.04	0.10	0.10	0.04	0.06	0.00	0.12	0.15	0.04	0.02	0.13	0.23	0.08	0.15	0.02	0.08	0.02	0.01	0.02	0.03	0.22	0.03	0.02	0.11	0.03	0.06	0.02	0.10
	Lead, Total	0.03	0.08	0.19	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.09	0.00	0.00	0.00	0.01	0.01
	Nickel, Total	0.09	0.04	0.25	0.01	0.28	0.12	0.33	0.06	0.28	0.02	0.31	0.08	0.07	0.13	0.04	0.09	0.32	0.28	0.33	0.04	0.00	0.04	0.06	0.32	0.05	0.19	0.48	0.02
	Selenium, Total	0.75	0.54	0.15	0.72	0.44	0.03	0.07	0.37	0.53	0.74	0.14	0.00	0.39	0.03	0.00	0.00	0.22	0.24	0.17	0.79	0.00	0.14	0.00	0.03	0.00	0.01	0.01	0.71
	Zinc, Total	0.05	0.17	0.18	0.09	0.11	0.67	0.07	0.21	0.06	0.05	0.14	0.37	0.11	0.48	0.82	0.16	0.31	0.35	0.35	0.03	0.30	0.17	0.40	0.16	0.53	0.12	0.29	0.09
	Sum Mass Fractions	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Correlation Matrix (Values of R^2)

	GW-20RS	GW-ND	GW-NS	P2RI-16D	P2RI-16S	P2RI-18D	P2RI-18SR	P2RI-19D	P2RI-19S	P2RI-21S	P2RI-22D	P2RI-22S	P2RI-23D	P2RI-23S	P2RI-24D	P2RI-25D	P2RI-25S	P2RI-26D	P2RI-26S	P2RI-33D	P2RI-33S	P2RI-37D	P2RI-37S	P2RI-9D	P2RI-9S	GW-11	P2RI-51S
GW-20D	0.92	0.05	0.96	0.76	0.02	0.03	0.68	0.84	0.95	0.02	0.11	0.55	0.04	0.02	0.05	0.13	0.14	0.04	0.99	0.11	0.00	0.08	0.07	0.05	0.07	0.04	0.97
GW-20RS		0.08	0.93	0.64	0.00	0.08	0.82	0.69	0.88	0.01	0.01	0.54	0.00	0.01	0.04	0.15	0.19	0.07	0.89	0.03	0.00	0.01	0.08	0.00	0.08	0.04	0.96
GW-ND			0.01	0.23	0.11	0.42	0.02	0.18	0.01	0.27	0.01	0.00	0.09	0.07	0.01	0.45	0.37	0.42	0.01	0.03	0.02	0.02	0.12	0.02	0.00	0.36	0.02
GW-NS				0.67	0.00	0.09	0.79	0.72	0.99	0.02	0.05	0.68	0.01	0.00	0.01	0.09	0.12	0.03	0.97	0.03	0.03	0.02	0.06	0.01	0.02	0.07	0.99
P2RI-16D					0.00	0.06	0.53	0.97	0.65	0.31	0.05	0.42	0.00	0.00	0.03	0.47	0.43	0.31	0.70	0.11	0.00	0.05	0.02	0.02	0.01	0.08	0.67
P2RI-16S						0.01	0.08	0.01	0.01	0.07	0.63	0.01	0.92	0.96	0.10	0.33	0.41	0.43	0.03	0.35	0.11	0.65	0.15	0.86	0.08	0.20	0.01
P2RI-18D							0.12	0.03	0.07	0.48	0.01	0.04	0.00	0.05	0.00	0.14	0.05	0.14	0.06	0.06	0.02	0.02	0.43	0.03	0.05	0.49	0.08
P2RI-18SR								0.49	0.74	0.08	0.06	0.69	0.09	0.08	0.01	0.17	0.22	0.10	0.67	0.04	0.09	0.02	0.00	0.06	0.00	0.02	0.80
P2RI-19D									0.71	0.19	0.12	0.39	0.03	0.02	0.07	0.36	0.33	0.22	0.79	0.18	0.01	0.11	0.00	0.07	0.04	0.03	0.74
P2RI-19S										0.02	0.06	0.74	0.03	0.02	0.00	0.06	0.08	0.01	0.96	0.03	0.05	0.02	0.04	0.01	0.01	0.09	0.96
P2RI-21S											0.11	0.15	0.13	0.01	0.16	0.36	0.25	0.33	0.01	0.04	0.11	0.06	0.76	0.08	0.29	0.40	0.01
P2RI-22D												0.01	0.84	0.60	0.30	0.04	0.06	0.09	0.12	0.80	0.21	0.60	0.25	0.76	0.22	0.04	0.05
P2RI-22S													0.01	0.00	0.22	0.03	0.04	0.00	0.56	0.07	0.45	0.08	0.04	0.06	0.17	0.07	0.61
P2RI-23D														0.89	0.12	0.26	0.32	0.36	0.06	0.49	0.10	0.58	0.21	0.82	0.09	0.19	0.01
P2RI-23S															0.03	0.27	0.37	0.38	0.03	0.31	0.04	0.53	0.05	0.77	0.01	0.14	0.01
P2RI-24D																0.03	0.03	0.02	0.05	0.61	0.90	0.60	0.45	0.41	0.94	0.00	0.03
P2RI-25D																	0.97	0.09	0.01	0.01	0.01	0.02	0.16	0.11	0.00	0.65	0.09
P2RI-25S																		0.96	0.11	0.00	0.01	0.04	0.10	0.16	0.01	0.55	0.12
P2RI-26D																			0.03	0.00	0.02	0.05	0.19	0.17	0.00	0.73	0.03
P2RI-26S																				0.10	0.00	0.09	0.09	0.06	0.06	0.06	0.97
P2RI-33D																					0.48	0.66	0.23	0.67	0.45	0.00	0.04
P2RI-33S																						0.59	0.26	0.40	0.79	0.04	0.01
P2RI-37D																							0.27	0.92	0.49	0.02	0.04
P2RI-37S																								0.24	0.63	0.40	0.08
P2RI-9D																									0.32	0.06	0.02
P2RI-9S																										0.01	0.06
GW-11																											0.07

TABLE 7.1-4. SHALLOW-DEEP WELL PAIRS IN ALLUVIAL SEDIMENTS AND WEATHERED SHALE
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Shallow well (screened in alluvial sediments)	Deep Well (screened in weathered shale)	Approximate Shallow Well Water Elevation (FT AMSL)	Approximate Deep Well Water Elevation (FT AMSL)	Vertical Gradient	Fluid Level Communication Test	Metals Fingerprint Regression Coefficient	Comment	Dissolved Phase Hydrocarbon Impacts	Suspected Connectivity
GW-11	P2RI-26D	3376	3374	None/Variable - note location difference of wells	N/A	0.73	GW-11 is approximately 100 yards south of P2RI-26D	Shallow - Benzene & TPH Deep - Benzene & TPH	Well-Connected
GW-20RS	GW-20D	3370	3372	Upward	Water level in either well will drop by 1-2 ft during groundwater sampling in the other well	0.92	--	Shallow - None Deep - None	Well-Connected
GW-NS	GW-ND	3374	3374	None/Variable	-0.03 ft drawdown at GW-NS when GW-ND pumped for 30 minutes at 150 mL/min	0.01	--	Shallow - None Deep - Benzene	Separate
P2RI-16S	P2RI-16D	3374	3376.5	Upward	-0.03 ft drawdown at P2RI-16S when P2RI-16D pumped for 45 minutes at 200 mL/min	0.00	P2RI-16S cross-screens overburden - weathered shale interface	Shallow - None Deep - None	Separate
P2RI-18SR	P2RI-18D	3371.5	3374.5	Upward	N/A	0.12	Flowing artesian conditions common at P2RI-18D	Shallow - None Deep - None	Separate
P2RI-19S	P2RI-19D	3356.5	3358.5	Upward	0.03 ft drawdown at P2RI-19S when P2RI-19D pumped for 1 hour at 170 mL/min	0.71	--	Shallow - None Deep - None	Separate - slight leakage
P2RI-21S	P2RI-21D	3347	3325	Downward	N/A	N/A	Very little water in P2RI-21D	Shallow - None Deep - None	Unknown
P2RI-22S	P2RI-22D	3339	3330	Downward	0.00 ft drawdown at P2RI-22S when P2RI-22D pumped for 2 hours at 250 mL/min	0.01	--	Shallow - None Deep - None	Separate
P2RI-23S	P2RI-23D	3341	3338	Downward	-0.02 ft drawdown at P2RI-23S when P2RI-23D pumped for 40 minutes at 300 mL/min. Note P2RI-23D's water level dropped only 0.22 feet during this pumping	0.89	--	Shallow - None Deep - None	Separate - slight leakage
P2RI-24S	P2RI-24D	DRY	3376	Downward	N/A	N/A	P2RI-24D screened in competent shale; P2RI-24S cross-screens the overburden - weathered shale interface	Shallow - Dry Deep - None	No Shallow Aquifer
P2RI-25S	P2RI-25D	3361	3361	None/Variable	N/A	0.97	P2RI-25S cross-screened the overburden - weathered shale interface. P2RI-25S was abandoned and P2RI-25D was installed in the weathered shale.	Shallow - Benzene & Trace TPH Deep - Benzene & Trace TPH	Naturally separate but P2RI-25S screen allowed inter-aquifer flow
P2RI-26S	P2RI-26D	3374	3374	None/Variable	0.00 ft drawdown at P2RI-26S when P2RI-26D pumped for 1 hour at 5700 mL/min)	0.03	--	Shallow - Trace Benzene Deep - Benzene & TPH	Separate

TABLE 7.1-4. SHALLOW-DEEP WELL PAIRS IN ALLUVIAL SEDIMENTS AND WEATHERED SHALE
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Shallow well (screened in alluvial sediments)	Deep Well (screened in weathered shale)	Approximate Shallow Well Water Elevation (FT AMSL)	Approximate Deep Well Water Elevation (FT AMSL)	Vertical Gradient	Fluid Level Communication Test	Metals Fingerprint Regression Coefficient	Comment	Dissolved Phase Hydrocarbon Impacts	Suspected Connectivity
P2RI-33S	P2RI-33D	3327	3326	Downward	N/A	0.48	--	Shallow - None Deep - None	Separate
P2RI-37S	P2RI-37D	3324	3324.5	Upward	N/A	0.27	P2RI-37D screened in competent shale	Shallow - None Deep - None	Separate
P2RI-51S	P2RI-25D	3367	3361	Downward	N/A	0.09	P2RI-51S is approximately 100 feet southeast of P2RI-25D	Shallow - None Deep - Benzene & Trace TPH	Separate
P2RI-9S	P2RI-9D	3337.5	3334.5	Downward	0.00 ft drawdown at P2RI-9S when P2RI-9D pumped dry (12 minutes at ~2300 mL/min)	0.32	P2RI-9D screened in fractured lower zone of weathered shale near transition to competent	Shallow - None Deep - None	Separate

Notes:
TPH - Total Purgeable Hydrocarbons
N/A - Not available
ft - feet
FT AMSL - feet above mean sea level
mL/min - milliliters per minute
"--" - no comment

TABLE 7.2-1. DISSOLVED PHASE BENZENE IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Mann-Kendall τ	Mann-Kendall p	MannKendall Result*	Representative Concentration (mg/L)	Comment
GW-11	33	0	3	30	33	2.7	2.2	0.322	0.0091751	Increasing	2.7	Increasing trend, used highest value.
GW-12	31	0	2	29	31	0.1	0.068	0.0388	0.7726	Not Significant	0.0284	No trend, median value.
GW-14	25	0	1	24	25	0.14	0.099	0.177	0.22445	Not Significant	0.06	No trend, median value.
GW-16	31	0	8	23	31	0.0876	0.0033	-0.31	0.015064	Decreasing	0.0324	Decreasing trend, median value.
GW-16R	9	3	1	5	6	0.33	0.0062	0.333	0.45237	Not Significant	0.0146	No trend, median value.
GW-18	19	0	1	18	19	0.53533	0.225	-0.228	0.1837	Not Significant	0.225	No trend, median value.
GW-19	35	1	3	31	34	0.16	0.12	0.41	0.00075042	Increasing	0.16	Increasing trend, used highest value.
GW-21	32	0	5	27	32	0.87461	0.25	-0.505	5.37E-05	Decreasing	0.506	Decreasing trend, median value.
GW-23	31	1	6	24	30	0.134	0.0022 J	-0.729	1.72E-08	Decreasing	0.0297	Decreasing trend, median value.
GW-31	15	0	2	13	15	2.3	1.6	-0.358	0.083931	Decreasing	1.8	Decreasing trend, median value.
GW-5R	23	2	5	16	21	0.028	0.0049	-0.434	0.0065487	Decreasing	0.00624	Decreasing trend, median value.
GW-6R	25	0	1	24	25	2.3	0.021	-3.07	0.033561	Decreasing	0.0211	Decreasing trend, median value.
GW-C-29	4	0	1	3	4	0.034	0.023 J	0	1	Not Significant	0.0205	No trend, median value.
GW-C-47DF	4	0	1	3	4	0.064	0.034	-1	0.089429	Decreasing	0.0405	Decreasing trend, median value.
GW-C-47S	6	0	1	5	6	0.31	0.11	-0.0667	1	Not Significant	0.185	No trend, median value.
GW-C-48	4	0	2	2	4	0.073	0.019	0	1	Not Significant	0.04	No trend, median value.
GW-ES	4	0	1	3	4	1.3	1.2 J	0.667	0.30818	Not Significant	1.09	No trend, median value.
GW-K	4	0	0	4	4	0.063	0.059	0.333	0.7341	Not Significant	0.0605	No trend, median value.
GW-MDF	4	0	0	4	4	0.14	0.046	-0.667	0.30818	Not Significant	0.0595	No trend, median value.
GW-ND	7	2	1	4	5	0.022	0.0021 J	-1	0.027486	Decreasing	0.0073	Decreasing trend, median value.
LSSI-10	2	0	0	2	2	0.655	0.655	N/A	N/A	N/A	0.655	Insufficient data for trend test, used most recent value.
LSSI-12	2	0	0	2	2	0.105	0.105	N/A	N/A	N/A	0.105	Insufficient data for trend test, used most recent value.
LSSI-15	2	0	1	1	2	0.177	0.177 J	N/A	N/A	N/A	0.177	Insufficient data for trend test, used most recent value.
LSSI-19	1	0	1	0	1	0.00979	0.00979 J	N/A	N/A	N/A	0.00979	Insufficient data for trend test, used most recent value.
LSSI-21	2	0	1	1	2	0.269	0.269 J	N/A	N/A	N/A	0.269	Insufficient data for trend test, used most recent value.
LSSI-27	2	0	1	1	2	0.135	0.135 J	N/A	N/A	N/A	0.135	Insufficient data for trend test, used most recent value.
LSSI-28	2	0	1	1	2	0.31	0.31 J	N/A	N/A	N/A	0.31	Insufficient data for trend test, used most recent value.
LSSI-29	2	0	1	1	2	0.474	0.39 J	N/A	N/A	N/A	0.39	Insufficient data for trend test, used most recent value.
LSSI-32	2	0	1	1	2	2.16	2.16 J	N/A	N/A	N/A	2.16	Insufficient data for trend test, used most recent value.
LSSI-36	1	0	0	1	1	1.93	1.93	N/A	N/A	N/A	1.93	Insufficient data for trend test, used most recent value.
LSSI-38	2	0	1	1	2	0.0228	0.0194 J	N/A	N/A	N/A	0.0194	Insufficient data for trend test, used most recent value.
LSSI-39	2	0	0	2	2	2.9	2.9	N/A	N/A	N/A	2.9	Insufficient data for trend test, used most recent value.
LSSI-43	2	0	0	2	2	1.09	1.09	N/A	N/A	N/A	1.09	Insufficient data for trend test, used most recent value.
LSSI-44	2	0	0	2	2	0.212	0.193	N/A	N/A	N/A	0.193	Insufficient data for trend test, used most recent value.
LSSI-5	3	0	2	1	3	0.111	0.00662 J	N/A	N/A	N/A	0.00662	Insufficient data for trend test, used most recent value.
LSSI-6	5	1	0	4	4	1.16	1.16	0.667	0.30818	Not Significant	0.766605	No trend, median value.
LSSI-7	4	1	0	3	3	0.597	0.168	N/A	N/A	N/A	0.168	Insufficient data for trend test, used most recent value.
LSSI-8	2	0	1	1	2	0.483	0.321 J	N/A	N/A	N/A	0.321	Insufficient data for trend test, used most recent value.
P2RI-25D	6	0	1	5	6	0.26	0.22	-0.467	0.25966	Not Significant	0.2	No trend, median value.
P2RI-25S	4	0	0	4	4	0.18	0.16	-0.333	0.7341	Not Significant	0.14	No trend, median value.
P2RI-26D	4	0	1	3	4	1.5	1.5	0.333	0.7341	Not Significant	1.35	No trend, median value.
P2RI-26S	4	2	0	2	2	0.0095	0.0071	N/A	N/A	N/A	0.0071	Insufficient data for trend test, used most recent value.
P2RI-43S	4	0	1	3	4	0.7	0.65	0.333	0.7341	Not Significant	0.625	No trend, median value.
P2RI-45E	2	0	1	1	2	2.7	2.7	N/A	N/A	N/A	2.7	Insufficient data for trend test, used most recent value.
P2RI-45S	6	0	2	4	6	0.3	0.23	0.2	0.70711	Not Significant	0.155	No trend, median value.
P2RI-46D	4	0	0	4	4	0.015	0.015	1	0.089429	Increasing	0.015	Insufficient data for trend test, used most recent value.
P2RI-46DFU	4	0	1	3	4	0.019	0.0031 J	-0.667	0.30818	Not Significant	0.00585	No trend, median value.
P2RI-46S	4	0	0	4	4	0.22	0.0098	-1	0.089429	Decreasing	0.034	Decreasing trend, median value.
P2RI-4S	5	0	1	4	5	1.5	0.89	-0.6	0.22067	Not Significant	1.3	No trend, median value.
P2RI-5	6	0	1	5	6	0.4	0.23	0	1	Not Significant	0.21	No trend, median value.
P2RI-53S	4	0	1	3	4	0.17	0.14 J	-0.548	0.4701	Not Significant	0.15	No trend, median value.

TABLE 7.2-1. DISSOLVED PHASE BENZENE IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Mann-Kendall τ	Mann-Kendall p	MannKendall Result*	Representative Concentration (mg/L)	Comment
P2RI-5S	4	1	1	2	3	0.022	0.022 J	N/A	N/A	N/A	0.022	Insufficient data for trend test, used most recent value.
P2RI-6	4	0	0	4	4	3.1	2.7	-0.183	1	Not Significant	2.7	No trend, median value.
P2RI-60S	3	2	0	1	1	0.018	0.018	N/A	N/A	N/A	0.018	Insufficient data for trend test, used most recent value.
P2RI-7	5	0	1	4	5	0.018	0.013 J	0.333	0.7341	Not Significant	0.0145	No trend, median value.
PA-1	1	0	0	1	1	0.47	0.47	N/A	N/A	N/A	0.47	Insufficient data for trend test, used most recent value.
PTA1	5	0	4	1	5	0.142	0.123	N/A	N/A	N/A	0.123	Sampled 4 times within 4 days in November 2006. Used most recent value.
PTA1-EXT	4	0	2	2	4	0.196	0.151 J	N/A	N/A	N/A	0.164	Sampled 4 times within a week in November 2006. Used most recent, un-qualified result.
PTA2	1	0	0	1	1	0.0832	0.0832	N/A	N/A	N/A	0.0832	Insufficient data for trend test, used most recent value.
PTA3	4	0	0	4	4	1.18	1.11	N/A	N/A	N/A	1.11	Sampled 3 times within a week in November 2006. Used most recent value.
PTA3-EXT	1	0	0	1	1	2.01	2.01	N/A	N/A	N/A	2.01	Insufficient data for trend test, used most recent value.
SD01-TP-01	4	0	1	3	4	1.3	0.062	-1	0.089429	Decreasing	0.94	Decreasing trend, median value.
SD01-TP-03	4	0	3	1	4	0.066	0.011	0	1	Not Significant	0.00635	Decreasing trend, median value.
SDW-11S	1	0	1	0	1	0.12	0.12 J	N/A	N/A	N/A	0.12	Insufficient data for trend test, used most recent value.
SDW-19D	3	0	0	3	3	0.006	0.0053	N/A	N/A	N/A	0.0053	Insufficient data for trend test, used most recent value.
SDW-25D	2	0	0	2	2	0.15	0.064	N/A	N/A	N/A	0.064	Insufficient data for trend test, used most recent value.
SDW-5D	2	0	0	2	2	2.1	1.01	N/A	N/A	N/A	1.01	Insufficient data for trend test, used most recent value.
SDW-7S	1	0	1	0	1	0.18	0.18 J	N/A	N/A	N/A	0.18	Insufficient data for trend test, used most recent value.
SDW-8S	1	0	1	0	1	0.16	0.16 J	N/A	N/A	N/A	0.16	Insufficient data for trend test, used most recent value.
SDW-9S	1	0	1	0	1	0.01	0.01 J	N/A	N/A	N/A	0.01	Insufficient data for trend test, used most recent value.

Notes:
N/A - not available
mg/L - milligrams per liter
J - estimated concentration
* - A 90% significance level (α = 0.1), was used for this interpretation
The significance of the trend test is determined by the values of p and α; if p is less than α, the test is significant.
The sign of τ indicates the direction of the trend; if τ is negative the trend is decreasing, if τ is positive the trend is increasing.
This analysis current as of August 2012.

TABLE 7.2-2. NON-BENZENE-IMPACTED WELLS WITH HISTORICAL DETECTIONS ABOVE STANDARD
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Mann-Kendall τ	Mann-Kendall p	MannKendall Result*	Representative Concentration (mg/L)	Comment
GW-A	4	0	0	4	4	0.012	0.0036	-0.333	0.7341	Not Significant	0.00285	No trend, median value. The median value was below the DEQ-7 HHS.
LSSI-11	2	1	0	1	1	0.0149	ND(0.0005)	N/A	N/A	N/A	0.0005	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
LSSI-37	2	1	0	1	1	0.0113	ND(0.0025)	N/A	N/A	N/A	0.0025	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
P2RI-14	4	0	2	2	4	0.016	0.0008 J	-0.333	0.7341	Not Significant	0.00065	No trend, median value. The median value was below the DEQ-7 HHS.
P2RI-56DF	3	0	1	2	3	0.021	0.0037	N/A	N/A	N/A	0.0037	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
P2RI-8	4	2	2	0	2	0.01	0.0035 J	N/A	N/A	N/A	0.0035	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
SDW-28D	3	2	0	1	1	0.007	ND(0.0005)	N/A	N/A	N/A	0.0005	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
SDW-29S	2	1	0	1	1	0.008	ND(0.0005)	N/A	N/A	N/A	0.0005	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
SDW-30D	3	0	0	3	3	0.045	0.0024	N/A	N/A	N/A	0.0024	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.
SDW-30S	2	1	0	1	1	0.031	ND(0.0005)	N/A	N/A	N/A	0.0005	Insufficient data for trend test, used most recent value. This value was below the DEQ-7 HHS.

Notes:
ND - not detected (reporting limit in parentheses)
N/A - not available
mg/L - milligrams per liter
J - estimated concentration
DEQ-7 HHS - Montana Department of Environmental Quality Circular Number 7 Human Health Standard for benzene in groundwater
* - A 90% significance level (α = 0.1), was used for this interpretation
The significance of the trend test is determined by the values of p and α; if p is less than α, the test is significant.
The sign of τ indicates the direction of the trend; if τ is negative the trend is decreasing, if τ is positive the trend is increasing.
This analysis current as of August 2012.

TABLE 7.2-3. SUMMARY OF DISSOLVED PHASE BENZENE DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Representative Concentration (mg/L)
GW-10	29	29	0	0	0	--	ND(0.005)	0.005
GW-13	22	15	4	3	7	0.0044	ND(0.005)	0.005
GW-15	20	20	0	0	0	--	ND(0.0025)	0.005
GW-17	21	21	0	0	0	--	ND(0.005)	0.005
GW-17R	3	3	0	0	0	--	ND(0.005)	0.005
GW-20	28	28	0	0	0	--	ND(0.005)	0.005
GW-20D	7	7	0	0	0	--	ND(0.005)	0.005
GW-20RS	7	7	0	0	0	--	ND(0.005)	0.005
GW-22	21	21	0	0	0	--	ND(0.0025)	0.005
GW-24	22	22	0	0	0	--	ND(0.0025)	0.005
GW-25	21	21	0	0	0	--	ND(0.005)	0.005
GW-25R	9	9	0	0	0	--	ND(0.005)	0.005
GW-26	28	28	0	0	0	--	ND(0.005)	0.005
GW-27	6	5	1	0	1	0.0007	ND(0.0005)	0.0025
GW-28	20	20	0	0	0	--	ND(0.0005)	0.005
GW-29	25	24	0	1	1	0.00222	ND(0.005)	0.005
GW-30	20	20	0	0	0	--	ND(0.005)	0.005
GW-30R	7	7	0	0	0	--	ND(0.005)	0.005
GW-4	24	24	0	0	0	--	ND(0.0025)	0.005
GW-4R	3	3	0	0	0	--	ND(0.005)	0.005
GW-5RR	7	6	1	0	1	0.0016	ND(0.005)	0.005
GW-C-24	4	4	0	0	0	--	ND(0.0025)	0.0025
GW-C-25	4	4	0	0	0	--	ND(0.0005)	0.0005
GW-C-45	4	4	0	0	0	--	ND(0.0025)	0.0025
GW-C-46DF	4	0	1	3	4	0.0012	0.0012	0.0012
GW-C-46S	4	4	0	0	0	--	ND(0.001)	0.001
GW-CD	3	0	2	1	3	0.0021	0.0015 J	0.0021
GW-CS	4	4	0	0	0	--	ND(0.0025)	0.0025
GW-ED	4	3	1	0	1	0.0005	ND(0.0025)	0.0025
GW-FS	4	4	0	0	0	--	ND(0.005)	0.005
GW-GS	4	4	0	0	0	--	ND(0.0025)	0.0025
GW-H	4	4	0	0	0	--	ND(0.0025)	0.0025
GW-L	4	4	0	0	0	--	ND(0.0005)	0.0005
GW-MS	4	4	0	0	0	--	ND(0.0025)	0.0025
GW-NS	9	9	0	0	0	--	ND(0.005)	0.005
LSSI-1	3	3	0	0	0	--	ND(0.005)	0.005
LSSI-13	2	2	0	0	0	--	ND(0.0005)	0.0025

TABLE 7.2-3. SUMMARY OF DISSOLVED PHASE BENZENE DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Representative Concentration (mg/L)
LSSI-14	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-17	2	2	0	0	0	--	ND(0.0005)	0.0005
LSSI-18	2	2	0	0	0	--	ND(0.0005)	0.0025
LSSI-2	3	3	0	0	0	--	ND(0.0005)	0.0025
LSSI-20	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-22	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-23	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-24	2	2	0	0	0	--	ND(0.0005)	0.0025
LSSI-25	2	2	0	0	0	--	ND(0.0005)	0.0025
LSSI-26	2	2	0	0	0	--	ND(0.0005)	0.0005
LSSI-3	3	3	0	0	0	--	ND(0.0005)	0.0025
LSSI-30	1	1	0	0	0	--	ND(0.005)	0.005
LSSI-31	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-33	2	2	0	0	0	--	ND(0.0005)	0.0025
LSSI-34	2	2	0	0	0	--	ND(0.0005)	0.0005
LSSI-35	2	2	0	0	0	--	ND(0.0005)	0.0005
LSSI-4	3	3	0	0	0	--	ND(0.0005)	0.0025
LSSI-40	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-41	2	2	0	0	0	--	ND(0.0025)	0.0025
LSSI-42	2	2	0	0	0	--	ND(0.0025)	0.0025
P2RI-10S	4	4	0	0	0	--	ND(0.0005)	0.0025
P2RI-11S	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-12	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-15	1	1	0	0	0	--	ND(0.0005)	0.0005
P2RI-16D	6	1	4	1	5	0.0042	0.0042 J	0.0042
P2RI-16S	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-17	4	4	0	0	0	--	ND(0.0025)	0.005
P2RI-18	2	2	0	0	0	--	ND(0.0005)	0.0005
P2RI-18D	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-18SR	6	6	0	0	0	--	ND(0.0025)	0.0025
P2RI-19D	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-19S	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-1D	4	3	1	0	1	0.0002	ND(0.0005)	0.0005
P2RI-1S	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-2	4	0	4	0	4	0.0031	0.003 J	0.0031
P2RI-20	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-21D	4	4	0	0	0	--	ND(0.0025)	0.005

TABLE 7.2-3. SUMMARY OF DISSOLVED PHASE BENZENE DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Representative Concentration (mg/L)
P2RI-21S	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-22D	6	5	0	1	1	0.0007	ND(0.005)	0.005
P2RI-22S	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-23D	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-23S	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-24D	4	4	0	0	0	--	ND(0.001)	0.001
P2RI-27D	4	1	3	0	3	0.0004	0.0004 J	0.0005
P2RI-27S	6	6	0	0	0	--	ND(0.0025)	0.0025
P2RI-28S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-29S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-30S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-31S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-32S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-33D	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-33S	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-34D	4	0	4	0	4	0.0002	0.0002 J	0.0002
P2RI-35S	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-36S	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-37D	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-37S	4	4	0	0	0	--	ND(0.0005)	0.0025
P2RI-3D	4	1	1	2	3	0.0029	0.0014 J	0.005
P2RI-3S	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-40S	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-41D	4	1	3	0	3	0.0004	0.0004 J	0.0005
P2RI-41S	2	2	0	0	0	--	ND(0.0005)	0.0005
P2RI-43D	4	3	1	0	1	0.0002	ND(0.0005)	0.0005
P2RI-44D	4	1	1	2	3	0.0013	0.0013	0.0013
P2RI-44SR	4	3	0	1	1	0.0015	0.0015	0.0015
P2RI-45D	6	3	3	0	3	0.0009	ND(0.005)	0.005
P2RI-46DFL	4	0	0	4	4	0.0017	0.0017	0.0017
P2RI-47DF	2	0	0	2	2	0.0039	0.0014	0.0039
P2RI-47S	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-48S	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-49S	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-4D	4	4	0	0	0	--	ND(0.005)	0.005
P2RI-50S	5	4	1	0	1	0.0019	0.0019 J	0.0025
P2RI-51S	7	7	0	0	0	--	ND(0.005)	0.005

TABLE 7.2-3. SUMMARY OF DISSOLVED PHASE BENZENE DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Representative Concentration (mg/L)
P2RI-52DF	4	0	2	2	4	0.0026	0.0021 J	0.0026
P2RI-52S	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-54SL	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-54SM	4	4	0	0	0	--	ND(0.0005)	0.0005
P2RI-54SU	4	4	0	0	0	--	ND(0.0025)	0.0025
P2RI-55S	3	3	0	0	0	--	ND(0.0025)	0.0025
P2RI-56S	1	1	0	0	0	--	ND(0.0025)	0.0025
P2RI-57S	3	2	1	0	1	0.0005	ND(0.0005)	0.0005
P2RI-58S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-59S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-61S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-62S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-63S	3	3	0	0	0	--	ND(0.005)	0.005
P2RI-9D	4	2	1	1	2	0.0001	0.0001	0.0005
P2RI-9S	4	4	0	0	0	--	ND(0.0005)	0.0005
PA-2	2	1	0	1	1	0.00288	ND(0.0025)	0.00288
PA-3	2	2	0	0	0	--	ND(0.0005)	0.0005
PA-4	2	2	0	0	0	--	ND(0.0005)	0.0025
PA-5	2	2	0	0	0	--	ND(0.0025)	0.0025
PA-5R	3	3	0	0	0	--	ND(0.005)	0.005
PA-6	2	1	1	0	1	0.001	ND(0.0025)	0.0025
PA-7	2	2	0	0	0	--	ND(0.0005)	0.0025
PA-8	2	2	0	0	0	--	ND(0.0025)	0.0025
PA-9	2	1	1	0	1	0.00335	ND(0.0025)	0.00335
SD01-TP-02	3	3	0	0	0	--	ND(0.005)	0.005
SD01-TP-04	3	3	0	0	0	--	ND(0.005)	0.005
SDW-10D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-10S	1	1	0	0	0	--	ND(0.05)	0.005
SDW-11D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-12D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-12S	1	1	0	0	0	--	ND(0.05)	0.005
SDW-13D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-14D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-14S	1	1	0	0	0	--	ND(0.05)	0.005
SDW-15S	1	1	0	0	0	--	ND(0.05)	0.005
SDW-16D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-16S	1	1	0	0	0	--	ND(0.05)	0.005

TABLE 7.2-3. SUMMARY OF DISSOLVED PHASE BENZENE DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Representative Concentration (mg/L)
SDW-1D	1	0	0	1	1	0.0019	0.0019	0.0019
SDW-22D	1	0	0	1	1	0.0014	0.0014	0.0014
SDW-22S	1	1	0	0	0	--	ND(0.0005)	0.0005
SDW-24M	1	0	0	1	1	0.0049	0.0049	0.0049
SDW-24S	1	1	0	0	0	--	ND(0.0005)	0.0005
SDW-25S	2	0	0	2	2	0.00099	0.00077	0.00099
SDW-26D	3	1	1	1	2	0.0011	0.0003 J	0.0011
SDW-26M	1	1	0	0	0	--	ND(0.0005)	0.0005
SDW-26S	1	1	0	0	0	--	ND(0.0005)	0.0005
SDW-27D	3	0	0	3	3	0.0022	0.0001	0.0022
SDW-27S	1	1	0	0	0	--	ND(0.0005)	0.0005
SDW-28S	2	1	0	1	1	0.0044	ND(0.0005)	0.0044
SDW-29D	1	0	0	1	1	0.0023	0.0023	0.0023
SDW-2D	3	1	0	2	2	0.00058	ND(0.0005)	0.00058
SDW-3D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-4D	4	1	0	3	3	0.0048	0.0017	0.0048
SDW-4S	2	2	0	0	0	--	ND(0.0005)	0.0005
SDW-6S	2	1	0	1	1	0.00038	ND(0.0005)	0.0005
SDW-7D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-8D	1	1	0	0	0	--	ND(0.05)	0.005
SDW-9D	1	0	1	0	1	0.005	0.005 J	0.005
SIGW-1	3	3	0	0	0	--	ND(0.05)	0.005
VCP06-RW	1	0	0	1	1	0.003	0.003	0.003

Notes:
"--" - benzene has never been detected in groundwater from this well
ND - not detected (reporting limit in parentheses)
N/A - not available
mg/L - milligrams per liter
J - estimated concentration
This analysis current as of August 2012.

TABLE 7.2-4. DISSOLVED PHASE TPH IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Mann-Kendall τ	Mann-Kendall p	MannKendall Result*	Representative Concentration (mg/L)	Comment
GW-11	37	0	9	28	37	18.8	15.8 J	-0.0257	0.83414	Not Significant	11.10	No trend, median value.
GW-12	37	3	19	15	34	5.69	3.18 J	0.0553	0.65651	Not Significant	1.22	No trend, median value.
GW-13	29	14	5	10	15	13.6	2.34 J	0.473	0.021489	Increasing	13.60	Increasing trend, used highest value.
GW-14	30	0	12	18	30	28.1	5.48 J	0.0667	0.61739	Not Significant	4.74	No trend, median value.
GW-16	37	3	18	16	34	15.8	0.51	-0.0556	0.65628	Not Significant	10.23	No trend, median value.
GW-16R	7	0	4	3	7	9.08	0.932 J	-0.0667	1	Not Significant	1.41	No trend, median value.
GW-18	23	0	2	21	23	9.23	1.28	-0.525	0.00053181	Decreasing	2.44	Decreasing trend, median value.
GW-19	41	12	20	9	29	1.19	1.19 J	0.499	0.00021911	Increasing	1.19	Increasing trend, used highest value.
GW-21	37	0	15	22	37	9.13	2.19 J	-0.464	5.61E-05	Decreasing	4.23	Decreasing trend, median value.
GW-31	21	0	9	12	21	28.5	26.5 J	-0.438	6.00E-03	Decreasing	22.20	Decreasing trend, median value.
GW-6R	29	0	9	20	29	7.21	1.23	-0.32	0.015529	Decreasing	1.04	No trend, median value.
GW-C-47S	6	0	6	0	6	12.2	3 J	-0.867	0.024171	Decreasing	4.70	Decreasing trend, median value.
GW-ES	4	0	0	4	4	3.45	2.91	0.333	0.7341	Not Significant	3.08	No trend, median value.
GW-K	4	0	4	0	4	3.02	3.02 J	0.667	0.30818	Not Significant	2.44	No trend, median value.
GW-MDF	4	0	4	0	4	4.93	1.67 J	-1	0.089429	Decreasing	2.03	Decreasing trend, median value.
P2RI-26D	4	0	2	2	4	4.1	4.1	0	1	Not Significant	4.01	No trend, median value.
P2RI-43S	4	0	3	1	4	11.9	9.75 J	0.333	0.7341	Not Significant	8.12	No trend, median value.
P2RI-45S	6	1	4	1	5	5.94	1.21 J	0	1	Not Significant	1.48	No trend, median value.
P2RI-46D	4	0	3	1	4	2.99	1.29	-0.667	0.30818	Not Significant	2.37	No trend, median value.
P2RI-4S	5	0	5	0	5	18.5	10.8 J	-0.2	0.8065	Not Significant	12.80	No trend, median value.
P2RI-53S	4	0	0	4	4	4.54	4.54	0.333	0.7341	Not Significant	4.37	No trend, median value.
P2RI-56DF	3	0	3	0	3	5.96	1.56 J	N/A	N/A	N/A	1.56	Insufficient data for trend test, used most recent value.
P2RI-5S	4	1	2	1	3	2.83	2.83 J	N/A	N/A	N/A	2.83	Insufficient data for trend test, used most recent value.
P2RI-6	4	0	2	2	4	27.8	21.6	0.333	0.7341	Not Significant	21.45	No trend, median value.
PA-1	1	0	0	1	1	18.2	18.2	N/A	N/A	N/A	18.2	Insufficient data for trend test, used most recent value.
SDW-25D	1	0	0	1	1	6.06	6.06	N/A	N/A	N/A	6.06	Insufficient data for trend test, used most recent value.
SDW-5D	1	0	0	1	1	19.7	19.7	N/A	N/A	N/A	19.70	Insufficient data for trend test, used most recent value.
LSSI-10	2	0	1	1	2	5.81	4.75 J	N/A	N/A	N/A	4.75	Insufficient data for trend test, used most recent value.
LSSI-12	2	0	2	0	2	1.46	1.46 J	N/A	N/A	N/A	1.46	Insufficient data for trend test, used most recent value.
LSSI-15	2	0	2	0	2	1.45	1.45 J	N/A	N/A	N/A	1.45	Insufficient data for trend test, used most recent value.
LSSI-21	2	0	2	0	2	2.58	1.65 J	N/A	N/A	N/A	1.65	Insufficient data for trend test, used most recent value.
LSSI-28	2	0	2	0	2	1.77	1.77 J	N/A	N/A	N/A	1.77	Insufficient data for trend test, used most recent value.
LSSI-29	2	0	1	1	2	6.54	4.49 J	N/A	N/A	N/A	4.49	Insufficient data for trend test, used most recent value.
LSSI-32	2	0	1	1	2	10.9	10.9 J	N/A	N/A	N/A	10.90	Insufficient data for trend test, used most recent value.
LSSI-36	1	0	0	1	1	8.35	8.35	N/A	N/A	N/A	8.35	Insufficient data for trend test, used most recent value.
LSSI-38	2	0	1	1	2	1.01	1.01 J	N/A	N/A	N/A	1.01	Insufficient data for trend test, used most recent value.
LSSI-39	2	0	0	2	2	26.2	21.8	N/A	N/A	N/A	21.80	Insufficient data for trend test, used most recent value.
LSSI-43	2	0	0	2	2	5.96	5.96	N/A	N/A	N/A	5.96	Insufficient data for trend test, used most recent value.
LSSI-44	2	0	1	1	2	14.1	13.1 J	N/A	N/A	N/A	13.10	Insufficient data for trend test, used most recent value.
LSSI-5	3	0	3	0	3	1.69	1.69 J	N/A	N/A	N/A	1.69	Insufficient data for trend test, used most recent value.

TABLE 7.2-4. DISSOLVED PHASE TPH IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Mann-Kendall τ	Mann-Kendall p	MannKendall Result*	Representative Concentration (mg/L)	Comment
LSSI-6	3	0	2	1	3	14.2	14.2 J	N/A	N/A	N/A	14.20	Insufficient data for trend test, used most recent value.
LSSI-7	3	0	0	3	3	6.58	1.26	N/A	N/A	N/A	1.26	Insufficient data for trend test, used most recent value.
LSSI-8	2	0	1	1	2	6.79	4.14 J	N/A	N/A	N/A	4.14	Insufficient data for trend test, used most recent value.
P2RI-45E	1	0	0	1	1	11.7	11.7	N/A	N/A	N/A	11.70	Insufficient data for trend test, used most recent value.
PTA1-EXT	4	0	2	2	4	1.99	1.12 J	-0.667	0.30818	Not Significant	1.21	No trend, median value.
PTA2	1	0	0	1	1	5.85	5.85	N/A	N/A	N/A	5.85	Insufficient data for trend test, used most recent value.
PTA3	4	0	0	4	4	12.1	6.57	-0.333	0.7341	Not Significant	6.75	No trend, median value.
PTA3-EXT	1	0	0	1	1	18.7	18.7	N/A	N/A	N/A	18.70	Insufficient data for trend test, used most recent value.
SD01-TP-01	4	0	1	3	4	2.34	0.514	-1	0.089429	Decreasing	1.02	Decreasing trend, median value.

Notes:
TPH - Total Purgeable Hydrocarbons
ND - not detected (reporting limit in parentheses)
N/A - not available
mg/L - milligrams per liter
J - estimated concentration
* - A 90% significance level (α = 0.1), was used for this interpretation
The significance of the trend test is determined by the values of p and α; if p is less than α, the test is significant.
The sign of τ indicates the direction of the trend; if τ is negative the trend is decreasing, if τ is positive the trend is increasing.
This analysis current as of August 2012.

TABLE 7.2-5. NON-TPH-IMPACTED WELLS WITH HISTORICAL DETECTIONS ABOVE STANDARD
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Mann-Kendall τ	Mann-Kendall p	MannKendall Result*	Representative Concentration (mg/L)	Comment
GW-25R	7	6	0	1	1	7.5	ND(0.5)	N/A	N/A	N/A	0.70	Impacted by PVC primer in June 2011. TPH was not detected in all other samples.
GW-C-47DF	4	0	3	1	4	2.33	0.529 J	-0.667	0.30818	Not Significant	0.74	No trend, median value. The median value was less than the RBCA Tier I RBSL.
P2RI-18SR	4	3	0	1	1	28.8	ND(0.5)	N/A	N/A	N/A	0.70	Impacted by PVC primer in June 2011. TPH was not detected in all other samples.
P2RI-27S	4	2	1	1	2	1.67	0.916	N/A	N/A	N/A	0.92	Impacted by PVC primer in June 2011. TPH was detected in only one other sample; this sample was selected as representative.
P2RI-46S	4	2	1	1	2	4.84	ND(1)	N/A	N/A	N/A	0.95	Insufficient data for trend test, used most recent value. TPH was not detected in the most recent sample.
P2RI-5	6	0	2	4	6	1.42	0.565	-0.476	0.25966	Not Significant	0.57	No trend, median value. The median value was less than the RBCA Tier I RBSL.
PTA1	5	0	4	1	5	1.78	0.778	0.2	0.8065	Not Significant	0.76	No trend, median value. The median value was less than the RBCA Tier I RBSL.

Notes:
TPH - Total Purgeable Hydrocarbons
ND - not detected (reporting limit in parentheses)
N/A - not available
mg/L - milligrams per liter
J - estimated concentration
PVC - polyvinyl chloride
RBCA Tier I RBSL - risk-based corrective action Tier I risk-based screening level for TPH
* - A 90% significance level (α = 0.1), was used for this interpretation
The significance of the trend test is determined by the values of p and α; if p is less than α, the test is significant.
The sign of τ indicates the direction of the trend; if τ is negative the trend is decreasing, if τ is positive the trend is increasing.
This analysis current as of August 2012.

TABLE 7.2-6. WELLS WITH DISSOLVED PHASE TPH DETECABLE BELOW STANDARD
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Maximum Detected Concentration (mg/L)	Most Recent Result (mg/L)	Representative Concentration (mg/L)
GW-15	29	27	1	1	2	0.199	ND(0.1)	0.20
GW-17	30	23	4	3	7	0.194	0.0876 J	0.19
GW-23	37	17	11	9	20	0.477	ND(0.1)	0.48
GW-29	31	30	1	0	1	0.25	ND(0.1)	0.25
GW-30	25	23	2	0	2	0.172	ND(0.5)	0.17
GW-4	30	28	1	1	2	0.118	ND(0.1)	0.12
GW-5R	30	16	9	5	14	0.148	0.148 J	0.15
GW-A	4	2	1	1	2	0.247	ND(0.1)	0.25
GW-C-29	4	3	1	0	1	0.722	ND(0.5)	0.72
GW-C-48	4	3	1	0	1	0.4	ND(0.5)	0.40
GW-ED	4	1	0	3	3	0.306	0.167	0.31
GW-NS	7	6	0	1	1	0.992	ND(0.1)	0.99
P2RI-14	4	3	1	0	1	0.117	ND(0.1)	0.12
P2RI-2	4	2	2	0	2	0.477	ND(0.5)	0.48
P2RI-25D	4	0	2	2	4	0.767	0.513	0.77
P2RI-25S	4	1	1	2	3	0.682	0.664	0.68
P2RI-46DFU	4	1	2	1	3	0.423	0.229 J	0.42
P2RI-7	5	2	3	0	3	0.355	0.355 J	0.36
P2RI-8	2	0	2	0	2	0.436	0.265 J	0.44
SDW-30D	2	0	0	2	2	0.271	0.106	0.27
SDW-4D	1	0	0	1	1	0.15	0.15	0.15
LSSI-11	2	1	1	0	1	0.196	ND(0.02)	0.20
LSSI-13	2	1	1	0	1	0.129	ND(0.02)	0.13
LSSI-17	2	0	2	0	2	0.879	0.879 J	0.88
LSSI-19	1	0	1	0	1	0.107	0.107 J	0.11
LSSI-22	2	1	1	0	1	0.248	ND(0.1)	0.25
LSSI-27	2	0	1	1	2	0.803	0.512 J	0.80
LSSI-3	3	2	1	0	1	0.127	ND(0.02)	0.13
LSSI-31	2	0	2	0	2	0.192	0.192 J	0.19
LSSI-37	2	0	1	1	2	0.52	0.223 J	0.52
PA-2	2	1	0	1	1	0.425	ND(0.1)	0.43
PA-6	2	1	1	0	1	0.455	ND(0.1)	0.46
PA-8	2	0	2	0	2	0.328	0.147 J	0.33
PA-9	2	0	1	1	2	0.937	0.133 J	0.94
VCP06-RW	1	0	0	1	1	0.315	0.315	0.32

Notes:
TPH - Total Purgeable Hydrocarbons
ND - not detected (reporting limit in parentheses)
mg/L - milligrams per liter
J - estimated concentration
This analysis current as of August 2012.

TABLE 7.2-7. SUMMARY OF DISSOLVED PHASE TPH DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Most Recent Result (mg/L)	Maximum Detected Concentration (mg/L)	Representative Concentration (mg/L)
GW-10	38	38	0	0	0	ND(0.1)	--	0.10
GW-17R	3	3	0	0	0	ND(0.1)	--	0.10
GW-20	37	34	1	2	3	ND(0.1)	0.0508	0.05
GW-20D	7	7	0	0	0	ND(0.5)	--	0.10
GW-20RS	7	7	0	0	0	ND(0.1)	--	0.10
GW-22	30	24	3	3	6	ND(0.1)	0.045	0.05
GW-24	30	25	3	2	5	ND(0.1)	0.033	0.03
GW-25	30	30	1	0	0	ND(0.1)	--	0.10
GW-26	37	337	1	0	0	ND(0.1)	--	0.10
GW-28	29	29	1	0	0	ND(0.1)	--	0.10
GW-30R	7	6	1	0	1	ND(0.1)	0.0532	0.05
GW-4R	3	3	0	0	0	ND(0.1)	--	0.10
GW-5RR	7	7	0	0	0	ND(0.5)	--	0.10
GW-C-24	4	4	0	0	0	ND(0.1)	--	0.10
GW-C-25	4	4	0	0	0	ND(0.1)	--	0.10
GW-C-45	4	4	0	0	0	ND(0.1)	--	0.10
GW-C-46DF	4	3	1	0	1	0.0625 J	0.0625	0.06
GW-C-46S	4	4	0	0	0	ND(0.1)	--	0.10
GW-CD	3	3	0	0	0	ND(0.1)	--	0.10
GW-CS	4	4	0	0	0	ND(0.1)	--	0.10
GW-FS	4	4	0	0	0	ND(0.5)	--	0.10
GW-GS	4	4	0	0	0	ND(0.5)	--	0.10
GW-H	4	4	0	0	0	ND(0.5)	--	0.10
GW-L	4	4	0	0	0	ND(0.1)	--	0.10
GW-MS	4	4	0	0	0	ND(0.5)	--	0.10
GW-ND	7	6	1	0	1	ND(0.5)	0.0639	0.06

TABLE 7.2-7. SUMMARY OF DISSOLVED PHASE TPH DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Most Recent Result (mg/L)	Maximum Detected Concentration (mg/L)	Representative Concentration (mg/L)
P2RI-10S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-11S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-12	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-16D	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-16S	4	3	1	0	1	ND(0.5)	0.087	0.09
P2RI-17	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-18	2	2	0	0	0	ND(0.1)	--	0.10
P2RI-18D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-19D	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-19S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-1D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-1S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-20	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-21D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-21S	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-22D	6	6	0	0	0	ND(5)	--	0.10
P2RI-22S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-23D	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-23S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-24D	4	3	1	0	1	0.0753 J	0.0753	0.08
P2RI-26S	4	3	1	0	1	ND(0.5)	0.0968	0.10
P2RI-27D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-28S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-29S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-30S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-31S	3	3	0	0	0	ND(0.1)	--	0.10

TABLE 7.2-7. SUMMARY OF DISSOLVED PHASE TPH DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Most Recent Result (mg/L)	Maximum Detected Concentration (mg/L)	Representative Concentration (mg/L)
P2RI-32S	3	1	2	0	2	ND(0.1)	0.0787	0.08
P2RI-33D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-33S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-34D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-35S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-36S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-37D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-37S	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-3D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-3S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-40S	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-41D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-41S	2	2	0	0	0	ND(0.1)	--	0.10
P2RI-43D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-44D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-44SR	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-45D	5	5	0	0	0	ND(0.1)	--	0.10
P2RI-46DFL	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-47DF	2	2	0	0	0	ND(0.1)	--	0.10
P2RI-47S	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-48S	4	4	0	0	0	ND(0.5)	--	0.10
P2RI-49S	4	4	0	0	0	ND(1)	--	0.10
P2RI-4D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-50S	5	4	1	0	1	ND(0.5)	0.0808	0.08
P2RI-51S	7	7	0	0	0	ND(0.1)	--	0.10
P2RI-52DF	4	3	1	0	1	0.0541 J	0.0541	0.05

TABLE 7.2-7. SUMMARY OF DISSOLVED PHASE TPH DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Most Recent Result (mg/L)	Maximum Detected Concentration (mg/L)	Representative Concentration (mg/L)
P2RI-52S	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-54SL	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-54SM	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-54SU	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-55S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-57S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-58S	3	3	0	0	0	ND(0.5)	--	0.10
P2RI-59S	3	3	0	0	0	ND(0.5)	--	0.10
P2RI-60S	3	2	1	0	1	0.0897 J	0.0897	0.09
P2RI-61S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-62S	3	3	0	0	0	ND(0.1)	--	0.10
P2RI-63S	3	3	0	0	0	ND(0.5)	--	0.10
P2RI-9D	4	4	0	0	0	ND(0.1)	--	0.10
P2RI-9S	4	4	0	0	0	ND(0.1)	--	0.10
PA-5R	3	3	0	0	0	ND(0.1)	--	0.10
SDW-19D	2	1	0	1	1	ND(0.1)	0.053	0.05
SDW-22D	1	0	0	1	1	0.05	0.05	0.05
SDW-25S	1	0	0	1	1	0.056	0.056	0.06
SDW-26D	2	2	0	0	0	ND(0.1)	--	0.10
SDW-26M	1	1	0	0	0	ND(0.05)	--	0.10
SDW-27D	2	2	0	0	0	ND(0.1)	--	0.10
SDW-27S	1	1	0	0	0	ND(0.05)	--	0.10
SDW-28D	2	1	0	1	1	ND(0.1)	0.021	0.02
SDW-28S	1	1	0	0	0	ND(0.05)	--	0.10
SDW-29S	1	1	0	0	0	ND(0.05)	--	0.10
SDW-2D	1	1	0	0	0	ND(0.05)	--	0.10

TABLE 7.2-7. SUMMARY OF DISSOLVED PHASE TPH DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Most Recent Result (mg/L)	Maximum Detected Concentration (mg/L)	Representative Concentration (mg/L)
SDW-30S	1	0	0	1	1	0.019	0.019	0.02
SIGW-1	2	1	1	0	1	0.0607 J	0.0607	0.06
GW-27	7	7	0	0	0	ND(0.02)	--	0.10
GW-7	2	2	0	0	0	ND(0.02)	--	0.10
GW-9	2	2	0	0	0	ND(0.02)	--	0.10
LSSI-1	3	3	0	0	0	ND(0.2)	--	0.10
LSSI-14	2	2	0	0	0	ND(0.1)	--	0.10
LSSI-18	2	2	0	0	0	ND(0.02)	--	0.10
LSSI-2	3	3	0	0	0	ND(0.02)	--	0.10
LSSI-20	2	2	0	0	0	ND(0.1)	--	0.10
LSSI-23	2	2	0	0	0	ND(0.1)	--	0.10
LSSI-24	2	2	0	0	0	ND(0.02)	--	0.10
LSSI-25	2	1	1	0	1	0.0222 J	0.0222	0.02
LSSI-26	2	2	0	0	0	ND(0.02)	--	0.10
LSSI-30	1	1	0	0	0	ND(0.2)	--	0.10
LSSI-33	2	1	1	0	1	0.0375 J	0.0375	0.04
LSSI-34	2	2	0	0	0	ND(0.02)	--	0.10
LSSI-35	2	2	0	0	0	ND(0.02)	--	0.10
LSSI-4	3	2	1	0	1	ND(0.02)	0.0258	0.03
LSSI-40	2	2	0	0	0	ND(0.1)	--	0.10
LSSI-41	2	2	0	0	0	ND(0.1)	--	0.10
LSSI-42	2	2	0	0	0	ND(0.1)	--	0.10
PA-3	2	2	0	0	0	ND(0.02)	--	0.10
PA-4	2	2	0	0	0	ND(0.02)	--	0.10
PA-5	2	2	0	0	0	ND(0.1)	--	0.10
PA-7	2	2	0	0	0	ND(0.02)	--	0.10

TABLE 7.2-7. SUMMARY OF DISSOLVED PHASE TPH DATA FOR NON-IMPACTED WELLS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Number of Data Points	Number of Non-Detects	Qualified Detections	Un-Qualified Detections	Total Detections	Most Recent Result (mg/L)	Maximum Detected Concentration (mg/L)	Representative Concentration (mg/L)
SD01-TP-02	3	3	0	0	0	ND(0.1)	--	0.10
SD01-TP-03	4	4	0	0	0	ND(0.1)	--	0.10
SD01-TP-04	3	3	0	0	0	ND(0.1)	--	0.10

Notes:

TPH - Total Purgeable Hydrocarbons

ND - not detected (reporting limit in parentheses)

mg/L - milligrams per liter

J - estimated concentration

"--" - TPH has never been detected in groundwater from this well

This analysis current as of August 2012.

TABLE 7.2-8. LNAPL CARBON RANGE ANALYSES AND CALCULATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Detailed Carbon Ranges	Average Number of Carbons	Average Molecular Weight of Hydrocarbon (all aliphatic)	SDW-21D	SDW-20D	SDW-31	SDW-24D	PA-1	LSSI-16	TB10-F05-DP01	TB18-E05-DP01
Benzene Concentration in LNAPL (mg/kg)			646	1290	1140	794	68	320	0.01	4.63
Carbon Chain Summary (Volume %)										
<C5-	4.0	58	0.002	0.008	0.011	0.012	0.000	0.007	0.000	0.002
C5-C6	5.5	79	0.010	0.024	0.029	0.032	0.001	0.073	0.004	0.007
C6-C7	6.5	93	0.038	0.042	0.047	0.055	0.004	0.147	0.013	0.019
C7-C8	7.5	107	0.066	0.059	0.063	0.073	0.013	0.201	0.033	0.034
C8-C9	8.5	121	0.284	0.294	0.270	0.248	0.020	0.205	0.020	0.014
C9-C10	9.5	135	0.252	0.246	0.253	0.213	0.028	0.158	0.026	0.019
C10-C11	10.5	149	0.172	0.164	0.159	0.155	0.033	0.119	0.028	0.021
C11-C12	11.5	163	0.107	0.100	0.101	0.100	0.037	0.059	0.030	0.027
C12-C13	12.5	177	0.043	0.039	0.040	0.047	0.054	0.026	0.036	0.033
C13-C14	13.5	191	0.015	0.014	0.015	0.023	0.043	0.004	0.036	0.037
C14-C15	14.5	205	0.005	0.004	0.005	0.011	0.050	0.002	0.037	0.042
C15-C16	15.5	219	0.002	0.002	0.002	0.010	0.042	0.001	0.038	0.040
C16-C17	16.5	233	0.002	0.001	0.002	0.008	0.046	0.001	0.037	0.038
C17-C18	17.5	247	0.001	0.001	0.001	0.007	0.042	<0.001	0.038	0.037
C18-C19	18.5	261	0.001	0.001	0.001	0.006	0.040	<0.001	0.039	0.039
C19-C20	19.5	275	<0.001	<0.001	<0.001	<0.001	0.031	<0.001	0.049	0.047
C20-C21	20.5	289	<0.001	<0.001	<0.001	<0.001	0.043	<0.001	0.048	0.048
C21-C22	21.5	303	<0.001	<0.001	<0.001	<0.001	0.031	<0.001	0.036	0.035
C22-C23	22.5	317	<0.001	<0.001	<0.001	<0.001	0.032	<0.001	0.033	0.031
C23-C24	23.5	331	<0.001	<0.001	<0.001	<0.001	0.025	<0.001	0.040	0.040
C24-C25	24.5	345	<0.001	<0.001	<0.001	<0.001	0.032	<0.001	0.029	0.028
C25-C26	25.5	359	<0.001	<0.001	<0.001	<0.001	0.026	<0.001	0.028	0.027
C26-C27	26.5	373	<0.001	<0.001	<0.001	<0.001	0.024	<0.001	0.030	0.027
C27-C28	27.5	387	<0.001	<0.001	<0.001	<0.001	0.028	<0.001	0.026	0.027
C28-C29	28.5	401	<0.001	<0.001	<0.001	<0.001	0.026	<0.001	0.025	0.027
C29-C30	29.5	415	<0.001	<0.001	<0.001	<0.001	0.027	<0.001	0.026	0.024
C30-C32	31.0	436	<0.001	<0.001	<0.001	<0.001	0.040	<0.001	0.048	0.047
C32-C34	33.0	464	<0.001	<0.001	<0.001	<0.001	0.035	<0.001	0.040	0.043
C34-C36	35.0	492	<0.001	<0.001	<0.001	<0.001	0.040	<0.001	0.040	0.041
C36-C38	37.0	520	<0.001	<0.001	<0.001	<0.001	0.030	<0.001	0.039	0.062
C38-C40	39.0	548	<0.001	<0.001	<0.001	<0.001	0.026	<0.001	0.036	0.040
C40+	44.0	618	<0.001	<0.001	<0.001	<0.001	0.054	<0.001	0.017	0.020

Molecular Weight Increments			SDW-21D	SDW-20D	SDW-31	SDW-24D	PA-1	LSSI-16	TB10-F05-DP01	TB18-E05-DP01
<C5-			0.116	0.464	0.638	0.696	0.006	0.394	0.017	0.110
C5-C6			0.790	1.896	2.291	2.528	0.087	5.767	0.292	0.521
C6-C7			3.534	3.906	4.371	5.115	0.400	13.625	1.246	1.776
C7-C8			7.062	6.313	6.741	7.811	1.402	21.475	3.499	3.627
C8-C9			34.364	35.574	32.670	30.008	2.372	24.781	2.360	1.694
C9-C10			34.020	33.210	34.155	28.755	3.726	21.290	3.443	2.552
C10-C11			25.628	24.436	23.691	23.095	4.902	17.671	4.112	3.174
C11-C12			17.441	16.300	16.463	16.300	5.950	9.682	4.857	4.352
C12-C13			7.611	6.903	7.080	8.319	9.487	4.549	6.425	5.894
C13-C14			2.865	2.674	2.865	4.393	8.289	0.669	6.800	6.972
C14-C15			1.025	0.820	1.025	2.255	10.250	0.328	7.524	8.672
C15-C16			0.438	0.438	0.438	2.190	9.220	0.175	8.322	8.672
C16-C17			0.466	0.233	0.466	1.864	10.602	0.117	8.505	8.807
C17-C18			0.247	0.247	0.247	1.729	10.374	0.049	9.411	9.016
C18-C19			0.261	0.261	0.261	1.566	10.466	0.026	10.127	10.049
C19-C20			0.000	0.000	0.000	0.000	8.388	0.028	13.393	12.843
C20-C21			0.000	0.000	0.000	0.000	12.369	0.000	13.843	13.756
C21-C22			0.000	0.000	0.000	0.000	9.272	0.000	10.787	10.666
C22-C23			0.000	0.000	0.000	0.000	10.017	0.000	10.524	9.827
C23-C24			0.000	0.000	0.000	0.000	8.374	0.000	13.273	13.108
C24-C25			0.000	0.000	0.000	0.000	11.075	0.000	10.005	9.557
C25-C26			0.000	0.000	0.000	0.000	9.155	0.000	10.052	9.693
C26-C27			0.000	0.000	0.000	0.000	8.766	0.000	11.004	10.108
C27-C28			0.000	0.000	0.000	0.000	10.643	0.000	10.101	10.488
C28-C29			0.000	0.000	0.000	0.000	10.546	0.000	9.985	10.747
C29-C30			0.000	0.000	0.000	0.000	11.122	0.000	10.624	10.043
C30-C32			0.000	0.000	0.000	0.000	17.484	0.000	20.710	20.536
C32-C34			0.000	0.000	0.000	0.000	16.147	0.000	18.421	19.998
C34-C36			0.000	0.000	0.000	0.000	19.877	0.000	19.631	20.369
C36-C38			0.000	0.000	0.000	0.000	15.704	0.000	20.332	32.292
C38-C40			0.000	0.000	0.000	0.000	14.467	0.000	19.618	21.810
C40+			0.000	0.000	0.000	0.000	33.125	0.000	10.568	12.298
LNAPL MOLECULAR WEIGHTS (g/mol)			**135.868**	**133.675**	**133.402**	**136.624**	**314.061**	**120.625**	**309.809**	**324.025**
BENZENE MOLE FRACTION			**1.13E-03**	**2.21E-03**	**1.95E-03**	**1.39E-03**	**2.74E-04**	**4.95E-04**	**3.88E-08**	**1.92E-05**
BENZENE EFFECTIVE SOLUBILITY (mg/L)			**2.014**	**3.957**	**3.490**	**2.489**	**0.490**	**0.886**	**0.000**	**0.034**

TABLE 7.2-8. LNAPL CARBON RANGE ANALYSES AND CALCULATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

General Carbon Ranges	Average Number of Carbons	Average Molecular Weight of Hydrocarbon (all aliphatic)	LSSI-9	SDW-5
Benzene Concentration in LNAPL (mg/kg)			180	1290
Carbon Chain Summary (Volume %)				
<C5-	4.0	58	0.034	0.015
C6-C10	8.0	114	0.779	0.807
C11-C14	12.5	177	0.179	0.178
C15+	24.0	338	0.008	0.001

Molecular Weight Increments				
<C5-			1.972	0.870
C6-C10			88.806	91.998
C11-C14			31.683	31.506
C15+			2.704	0.338
LNAPL MOLECULAR WEIGHTS (g/mol)			**125.165**	**124.712**
BENZENE MOLE FRACTION			**2.89E-04**	**2.06E-03**
BENZENE EFFECTIVE SOLUBILITY (mg/L)			**0.517**	**3.692**

Notes:

The carbon range data presented in this table provide a more accurate estimate of LNAPL molecular weight, and therefore the benzene mole fraction and effective solubility, than the n-alkane data presented in Table 7.2-9.

g/mol - grams per mole

mg/L - millgrams per liter

mg/kg - milligrams per kilogram

LNAPL Molecular Weights estimated using the "all aliphatics" assumption from

$$MW_{LNAPL} = \sum_{i=1}^{n} [F_i (12 C_i + 2C_i + 2)]$$

where:

n = number of carbon size ranges

Fi = measured fraction of total LNAPL volume in each carbon size range

C_i = average number of carbons over each range; e.g., C_i = 10 for carbon range C8-C12

MW_{LNAPL} = molecular weight of LNAPL (grams per mol)

Mole fractions estimated using

$$MF_b = C_b \left(\frac{MW_{LNAPL}}{MW_b} \right) \cdot 10^{-6}$$

where:

MF_b = mole fraction of benzene in LNAPL

C_b = measured concentration of benzene in LNAPL (mg/kg)

MW_b = molecular weight of benzene (=78 g/mol)[A]

Effective solubilities estimated using

$$S_{b,eff} = MF_b \cdot S_b$$

where:

$S_{b,eff}$ = effective solubility of benzene

S_b = pure phase solubility of benzene (=1790 mg/L)[A]

A - Syracuse Physical Properties Database
http://www.srcinc.com/what-we-do/databaseforms.aspx?id=386

TABLE 7.2-9. LNAPL N-ALKANE DISTRIBUTION DATA AND CALCULATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

	Number of Carbons	Molecular Weight of Hydrocarbon (all aliphatic)	GW-13	SDW-21D	SDW-20D	SDW-31	P2RI-45E	MWD-1-WET	VW-2-WET	LSSI-36	E	TB10-F05-DP01	TB18-E05-DP01	SDW-24D	PA-1	M	C-29	I	C-47	LSSI-9	LSSI-16	SDW-5-WET
Benzene Concentration in LNAPL (mg/kg)			ND(0.01)	646	1290	1140	1270	265	714	19.3	540	ND(0.01)	4.63	794	68	650	450	0.00978	880	180	320	1290
n-Alkanes (mg/kg)																						
Pentane	5	72	18900	7800	32500	39000	37900	1000	29800	52	4910	ND	347	27300	240	24000	16000	4400	19000	18000	28000	14800
Hexane	6	86	42400	28400	39500	41100	39600	8760	45600	207	30700	ND	500	30700	300	38000	35000	24000	30000	34000	40000	32500
Heptane	7	100	57400	49200	41900	41800	36800	18400	36800	730	48900	ND	635	30000	330	47000	47000	47000	40000	47000	45000	47000
Octane	8	114	52600	43100	36700	35100	30300	24200	26200	1930	46000	ND	495	24300	320	44000	46000	52000	40000	47000	42000	46800
n-Nonane (C9)	9	128	39700	35200	30800	27200	24400	36500	28100	3750	40100	76	806	27900	250	32000	32000	37000	30000	34000	29000	44900
n-Decane (C10)	10	142	24700	23900	20400	19000	17100	33600	24400	4740	29600	224	1130	19300	360	22000	21000	27000	21000	23000	19000	27500
n-Undecane (C11)	11	156	13100	13800	11400	11400	10600	23900	15600	3580	17600	241	1560	11500	500	14000	13000	16000	12000	13000	11000	15300
n-Dodecane (C12)	12	170	4690	5860	4770	4870	4960	10400	6760	1310	7240	243	1080	5360	ND	6000	5200	6100	5200	4800	3900	5900
n-Tridecane (C13)	13	184	1080	1580	1220	1280	1500	2960	1890	828	2310	555	1240	1380	ND	1700	1400	2000	1300	1600	450	1480
n-Tetradecane (C14)	14	198	116	275	219	232	646	696	357	356	372	183	1750	120	ND	390	320	620	320	420	180	228
n-Pentadecane (C15)	15	212	57	73	62	69	528	358	155	327	166	452	2000	ND	ND	54	37	370	32	240	50	65
n-Hexadecane (C16)	16	226	22	16	15	23	476	264	99	312	90	353	1380	ND	ND	29	20	320	19	200	42	10
n-Heptadecane (C17)	17	240	18	8	7	8	398	195	67	118	63	ND	736	ND	ND	20	12	270	13	180	27	5
n-Octadecane (C18)	18	254	15	6	4	6	506	153	51	109	46	ND	713	ND	ND	15	11	230	7	140	20	6
n-Nonadecane (C19)	19	268	18	4	3	4	344	131	45	392	34	116	419	ND	ND	ND	ND	160	ND	ND	ND	ND
n-Eicosane (C20)	20	282	15	4	3	4	398	114	41	490	33	537	776	ND	ND	16	10	190	10	120	24	ND
n-Heneicosane (C21)	21	296	15	5	4	5	263	99	35	470	31	ND	35	ND	ND	14	11	160	10	110	21	ND
n-Docosane (C22)	22	310	15	4	4	5	248	85	32	540	24	126	88	4	ND	18	17	160	13	96	19	ND
n-Tricosane (C23)	23	324	14	6	6	7	201	71	26	380	20	ND	124	ND	ND	13	21	130	16	83	20	ND
n-Tetracosane (C24)	24	338	13	3	2	4	180	59	21	330	19	ND	198	ND	ND	3	26	120	14	68	7	ND
n-Pentacosane (C25)	25	352	20	2	2	3	297	138	98	513	ND	ND	596	ND	ND	20	27	110	23	78	88	56
n-Hexacosane (C26)	26	366	10	3	2	3	144	44	15	340	16	ND	708	ND	ND	6	14	83	12	52	ND	8
n-Heptacosane (C27)	27	380	6	4	2	4	87	32	11	287	11	87	655	ND	ND	4	14	65	7	40	ND	12
n-Octacosane (C28)	28	394	8	2	1	1	67	29	13	159	ND	ND	532	ND	ND	ND	11	220	ND	190	ND	ND
n-Nonacosane (C29)	29	408	3	2	ND	ND	54	17	6	80	5	ND	465	ND	ND	ND	6	35	ND	23	ND	6
n-Triacontane (C30)	30	422	10	2	ND	ND	40	16	5	122	6	ND	621	ND	ND	ND	4	29	ND	18	ND	46
n-Hentriacontane (C31)	31	436	3	ND	ND	ND	25	10	4	63	9	42	551	ND	ND	ND	ND	21	ND	14	ND	12
n-Dotriacontane (C32)	32	450	2	ND	ND	ND	ND	12	4	217	3	ND	418	ND	ND	ND	ND	16	ND	10	ND	35
n-Tritriacontane (C33)	33	464	2	ND	ND	ND	ND	6	2	130	2	156	434	ND	ND	ND	ND	17	ND	10	ND	7
n-Tetratriacontane (C34)	34	478	ND	ND	ND	ND	ND	6	2	68	2	300	353	ND	ND	ND	ND	9	ND	7	ND	20
n-Pentatriacontane (C35)	35	492	ND	ND	ND	ND	ND	6	ND	328	3	408	454	ND	ND	ND	ND	ND	ND	ND	ND	3
n-Hexatriacontane (C36)	36	506	ND	ND	ND	ND	ND	7	5	ND	6	ND	152	ND	ND	ND	ND	ND	ND	ND	ND	15
n-Heptatriacontane (C37)	37	520	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	82	ND	ND	ND	ND	ND	ND	ND	ND	1
n-Octatriacontane (C38)	38	534	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nonatriacontane (C39)	39	548	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Tetracontane (C40)	40	562	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sum C5-C40			254950	209256	219525	221129	208062	162267	216243	23258	228321	4100	22033	177864	2300	229303	217161	218835	198996	224499	218848	236717

TABLE 7.2-9. LNAPL N-ALKANE DISTRIBUTION DATA AND CALCULATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

		GW-13	SDW-21D	SDW-20D	SDW-31	P2RI-45E	MWD-1-WET	VW-2-WET	LSSI-36	E	TB10-F05-DP01	TB18-E05-DP01	SDW-24D	PA-1	M	C-29	I	C-47	LSSI-9	LSSI-16	SDW-5-WET
Pentane	Mass fraction of analyte vs sum of all n-alkanes	0.074	0.037	0.148	0.176	0.182	0.006	0.138	0.002	0.022	0.000	0.016	0.153	0.104	0.105	0.074	0.020	0.095	0.080	0.128	0.063
Hexane		0.166	0.136	0.180	0.186	0.190	0.054	0.211	0.009	0.134	0.000	0.023	0.173	0.130	0.166	0.161	0.110	0.151	0.151	0.183	0.137
Heptane		0.225	0.235	0.191	0.189	0.177	0.113	0.170	0.031	0.214	0.000	0.029	0.169	0.143	0.205	0.216	0.215	0.201	0.209	0.206	0.199
Octane		0.206	0.206	0.167	0.159	0.146	0.149	0.121	0.083	0.201	0.000	0.022	0.137	0.139	0.192	0.212	0.238	0.201	0.209	0.192	0.198
n-Nonane (C9)		0.156	0.168	0.140	0.123	0.117	0.225	0.130	0.161	0.176	0.019	0.037	0.157	0.109	0.140	0.147	0.169	0.151	0.151	0.133	0.190
n-Decane (C10)		0.097	0.114	0.093	0.086	0.082	0.207	0.113	0.204	0.130	0.055	0.051	0.109	0.157	0.096	0.097	0.123	0.106	0.102	0.087	0.116
n-Undecane (C11)		0.051	0.066	0.052	0.052	0.051	0.147	0.072	0.154	0.077	0.059	0.071	0.065	0.217	0.061	0.060	0.073	0.060	0.058	0.050	0.065
n-Dodecane (C12)		0.018	0.028	0.022	0.022	0.024	0.064	0.031	0.056	0.032	0.059	0.049	0.030	0.000	0.026	0.024	0.028	0.026	0.021	0.018	0.025
n-Tridecane (C13)		0.004	0.008	0.006	0.006	0.007	0.018	0.009	0.036	0.010	0.135	0.056	0.008	0.000	0.007	0.006	0.009	0.007	0.007	0.002	0.006
n-Tetradecane (C14)		0.000	0.001	0.001	0.001	0.003	0.004	0.002	0.015	0.002	0.045	0.079	0.001	0.000	0.002	0.001	0.003	0.002	0.002	0.001	0.001
n-Pentadecane (C15)		0.000	0.000	0.000	0.000	0.003	0.002	0.001	0.014	0.001	0.110	0.091	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.000
n-Hexadecane (C16)		0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.013	0.000	0.086	0.063	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
n-Heptadecane (C17)		0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.005	0.000	0.000	0.033	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
n-Octadecane (C18)		0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.005	0.000	0.000	0.032	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
n-Nonadecane (C19)		0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.017	0.000	0.028	0.019	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
n-Eicosane (C20)		0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.021	0.000	0.131	0.035	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
n-Heneicosane (C21)		0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.020	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
n-Docosane (C22)		0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.023	0.000	0.031	0.004	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
n-Tricosane (C23)		0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.016	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
n-Tetracosane (C24)		0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.014	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
n-Pentacosane (C25)		0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.022	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
n-Hexacosane (C26)		0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.015	0.000	0.000	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Heptacosane (C27)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.021	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Octacosane (C28)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
n-Nonacosane (C29)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Triacontane (C30)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Hentriacontane (C31)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.010	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Dotriacontane (C32)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Tritriacontane (C33)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.038	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Tetratriacontane (C34)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.073	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Pentatriacontane (C35)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.100	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Hexatriacontane (C36)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Heptatriacontane (C37)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Octatriacontane (C38)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Nonatriacontane (C39)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Tetracontane (C40)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sum Fractions		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE 7.2-9. LNAPL N-ALKANE DISTRIBUTION DATA AND CALCULATIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

		GW-13	SDW-21D	SDW-20D	SDW-31	P2RI-45E	MWD-1-WET	VW-2-WET	LSSI-36	E	TB10-F05-DP01	TB18-E05-DP01	SDW-24D	PA-1	M	C-29	I	C-47	LSSI-9	LSSI-16	SDW-5-WET
Pentane	Molecular Weight Increments	5.338	2.684	10.659	12.698	13.115	0.444	9.922	0.160	1.548	0.000	1.134	11.051	7.513	7.536	5.305	1.448	6.875	5.773	9.212	4.502
Hexane		14.302	11.672	15.474	15.984	16.368	4.643	18.135	0.765	11.564	0.000	1.952	14.844	11.217	14.252	13.861	9.432	12.965	13.025	15.719	11.807
Heptane		22.514	23.512	19.087	18.903	17.687	11.339	17.018	3.139	21.417	0.000	2.882	16.867	14.348	20.497	21.643	21.477	20.101	20.935	20.562	19.855
Octane		23.520	23.480	19.058	18.095	16.602	17.002	13.812	9.460	22.968	0.000	2.561	15.575	15.861	21.875	24.148	27.089	22.915	23.866	21.878	22.538
n-Nonane (C9)		19.932	21.532	17.959	15.745	15.011	28.792	16.633	20.638	22.481	2.379	4.682	20.078	13.913	17.863	18.862	21.642	19.297	19.385	16.962	24.279
n-Decane (C10)		13.757	16.218	13.196	12.201	11.671	29.403	16.023	28.940	18.409	7.759	7.283	15.408	22.226	13.624	13.732	17.520	14.985	14.548	12.328	16.496
n-Undecane (C11)		8.016	10.288	8.101	8.042	7.948	22.977	11.254	24.013	12.025	9.171	11.045	10.086	33.913	9.525	9.339	11.406	9.407	9.033	7.841	10.083
n-Dodecane (C12)		3.127	4.761	3.694	3.744	4.053	10.896	5.314	9.575	5.391	10.077	8.333	5.123	0.000	4.448	4.071	4.739	4.442	3.635	3.029	4.237
n-Tridecane (C13)		0.779	1.389	1.023	1.065	1.327	3.356	1.608	6.551	1.862	24.910	10.355	1.428	0.000	1.364	1.186	1.682	1.202	1.311	0.378	1.150
n-Tetradecane (C14)		0.090	0.260	0.198	0.208	0.615	0.849	0.327	3.031	0.323	8.839	15.727	0.134	0.000	0.337	0.292	0.561	0.318	0.370	0.163	0.191
n-Pentadecane (C15)		0.048	0.074	0.060	0.066	0.538	0.468	0.152	2.981	0.154	23.375	19.244	0.000	0.000	0.050	0.036	0.358	0.034	0.227	0.048	0.058
n-Hexadecane (C16)		0.020	0.017	0.016	0.024	0.517	0.368	0.104	3.032	0.089	19.460	14.155	0.000	0.000	0.029	0.021	0.330	0.022	0.201	0.043	0.010
n-Heptadecane (C17)		0.016	0.009	0.007	0.009	0.459	0.288	0.074	1.218	0.066	0.000	8.017	0.000	0.000	0.021	0.013	0.296	0.016	0.192	0.030	0.005
n-Octadecane (C18)		0.015	0.007	0.005	0.007	0.618	0.239	0.060	1.190	0.051	0.000	8.220	0.000	0.000	0.017	0.013	0.267	0.008	0.158	0.023	0.007
n-Nonadecane (C19)		0.018	0.005	0.003	0.005	0.443	0.216	0.056	4.517	0.040	7.583	5.097	0.000	0.000	0.000	0.000	0.196	0.000	0.000	0.000	0.000
n-Eicosane (C20)		0.016	0.006	0.004	0.006	0.539	0.198	0.053	5.941	0.041	36.940	9.932	0.000	0.000	0.020	0.013	0.245	0.014	0.151	0.031	0.000
n-Heneicosane (C21)		0.017	0.007	0.005	0.007	0.374	0.181	0.047	5.982	0.041	0.000	0.465	0.000	0.000	0.018	0.015	0.216	0.015	0.145	0.028	0.000
n-Docosane (C22)		0.018	0.006	0.005	0.007	0.370	0.163	0.046	7.198	0.033	9.528	1.242	0.006	0.000	0.024	0.024	0.227	0.020	0.133	0.027	0.000
n-Tricosane (C23)		0.018	0.009	0.008	0.011	0.313	0.141	0.039	5.294	0.029	0.000	1.823	0.000	0.000	0.018	0.031	0.192	0.026	0.120	0.030	0.000
n-Tetracosane (C24)		0.018	0.005	0.004	0.006	0.292	0.123	0.033	4.796	0.027	0.000	3.037	0.000	0.000	0.005	0.040	0.185	0.024	0.102	0.011	0.000
n-Pentacosane (C25)		0.027	0.003	0.003	0.005	0.502	0.299	0.160	7.764	0.000	0.000	9.522	0.000	0.000	0.031	0.044	0.177	0.041	0.122	0.142	0.084
n-Hexacosane (C26)		0.014	0.004	0.003	0.005	0.253	0.098	0.026	5.351	0.025	0.000	11.761	0.000	0.000	0.010	0.024	0.139	0.022	0.085	0.000	0.012
n-Heptacosane (C27)		0.008	0.006	0.004	0.007	0.158	0.075	0.019	4.689	0.019	8.074	11.297	0.000	0.000	0.007	0.024	0.113	0.014	0.068	0.000	0.018
n-Octacosane (C28)		0.012	0.003	0.002	0.002	0.127	0.071	0.024	2.694	0.000	0.000	9.513	0.000	0.000	0.000	0.020	0.396	0.000	0.333	0.000	0.000
n-Nonacosane (C29)		0.004	0.003	0.000	0.000	0.105	0.042	0.012	1.409	0.008	0.000	8.611	0.000	0.000	0.000	0.011	0.065	0.000	0.042	0.000	0.010
n-Triacontane (C30)		0.016	0.004	0.000	0.000	0.082	0.041	0.011	2.214	0.011	0.000	11.894	0.000	0.000	0.000	0.007	0.056	0.000	0.034	0.000	0.083
n-Hentriacontane (C31)		0.005	0.000	0.000	0.000	0.053	0.027	0.007	1.172	0.017	4.488	10.904	0.000	0.000	0.000	0.000	0.042	0.000	0.027	0.000	0.023
n-Dotriacontane (C32)		0.003	0.000	0.000	0.000	0.000	0.033	0.007	4.199	0.005	0.000	8.537	0.000	0.000	0.000	0.000	0.033	0.000	0.020	0.000	0.067
n-Tritriacontane (C33)		0.004	0.000	0.000	0.000	0.000	0.018	0.005	2.594	0.005	17.657	9.140	0.000	0.000	0.000	0.000	0.036	0.000	0.021	0.000	0.013
n-Tetratriacontane (C34)		0.000	0.000	0.000	0.000	0.000	0.017	0.004	1.402	0.005	34.980	7.658	0.000	0.000	0.000	0.000	0.019	0.000	0.016	0.000	0.041
n-Pentatriacontane (C35)		0.000	0.000	0.000	0.000	0.000	0.020	0.000	6.939	0.007	48.966	10.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
n-Hexatriacontane (C36)		0.000	0.000	0.000	0.000	0.000	0.021	0.012	0.000	0.014	0.000	3.491	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.033
n-Heptatriacontane (C37)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.933	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
n-Octatriacontane (C38)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Nonatriacontane (C39)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
n-Tetracontane (C40)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LNAPL MOLECULAR WEIGHTS (g/mol)		**111.675**	**115.964**	**108.577**	**106.851**	**110.140**	**132.847**	**110.996**	**188.844**	**118.673**	**274.185**	**251.586**	**110.600**	**118.991**	**111.569**	**112.775**	**120.585**	**112.763**	**114.079**	**108.485**	**115.611**
BENZENE MOLE FRACTION		**1.40E-08**	**9.60E-04**	**1.80E-03**	**1.56E-03**	**1.79E-03**	**4.51E-04**	**1.02E-03**	**4.67E-05**	**8.22E-04**	**3.44E-08**	**1.49E-05**	**1.13E-03**	**1.04E-04**	**9.30E-04**	**6.51E-04**	**1.51E-08**	**1.27E-03**	**2.63E-04**	**4.45E-04**	**1.91E-03**
BENZENE EFFECTIVE SOLUBILITY (mg/L)		***0.000***	***1.719***	***3.214***	***2.795***	***3.210***	***0.808***	***1.819***	***0.084***	***1.471***	***0.000***	***0.027***	***2.015***	***0.186***	***1.664***	***1.165***	***0.000***	***2.277***	***0.471***	***0.797***	***3.423***

Notes:
If available, the carbon range data presented in Table 7.2-8 provide a more accurate estimate of LNAPL molecular weight, and therefore the benzene mole fraction and effective solubility, than the n-alkane data presented in this table.
ND - not detected
mg/L - millgrams per liter
mg/kg - milligrams per kilogram
g/mol - grams per mole
See final page for explanation of calculations

Notes (continued):
LNAPL Molecular Weights estimated using the "all aliphatics" assumption from

$$MW_{LNAPL} \approx \sum_{i=1}^{n} [F_i (12C_i + 2C_i + 2)]$$

where:
n = number of n-alkanes
Fi = measured fraction of total n-alkane mass in each individual n-alkane
C_i = number of carbons in of each n-alkane, for example C_{octane} = 8
MW_{LNAPL} = molecular weight of LNAPL, based on distribution of n-alkanes

Mole fractions estimated using

$$MF_b = C_b \left(\frac{MW_{LNAPL}}{MW_b} \right) \cdot 10^{-6}$$

where:
MF_b = mole fraction of benzene in LNAPL
C_b = measured concentration of benzene in LNAPL (mg/kg)
MW_b = molecular weight of benzene (=78 g/mol)[A]

Effective solubilities estimated using

$$S_{b,eff} = MF_b \cdot S_b$$

where:
$S_{b,eff}$ = effective solubility of benzene
S_b = pure phase solubility of benzene (=1790 mg/L)[A]

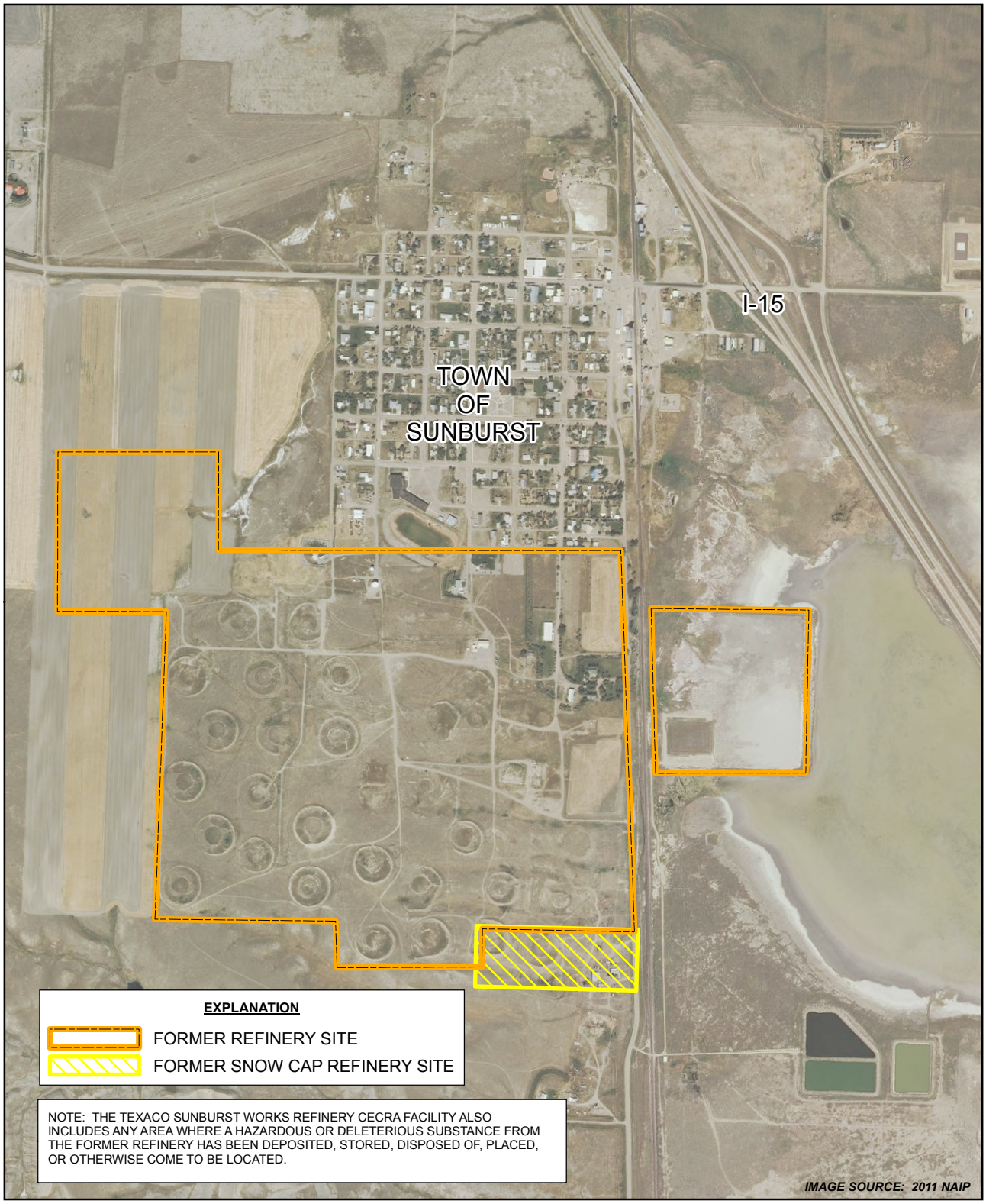
A - Syracuse Physical Properties Database http://www.srcinc.com/what-we-do/databaseforms.aspx?id=386

TABLE 7.2-10. SUMMARY OF HYDROCARBON IMPACTED AREAS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Area Description	Benzene and/or TPH Impacted Wells	LNAPL Chacteristics	Effective solubility of benzene from LNAPL	Typical Dissolved Phase Benzene Concentrations	Dissolved Phase Hydrocarbon Characteristics	Suspected Source Area(s)
Southeastern portion of Town of Sunburst	LSSI-21, LSSI-43, LSSI-44, GW-11, LSSI-39, GW-31, PTA3, PTA3-EXT, P2RI-26S, P2RI-26D, P2RI-25S, P2RI-25D, SDW-11S	None present; closest LNAPL occurrences were at GW-13, Boring E, and PA-1	N/A	1-3	Primarily the WSF of gasoline, with occasional minor amounts of crude oil	Pipeline release area / Localized source near GW-31
Central portion of Town of Sunburst; along drift-clay contact	GW-C-48, GW-13, GW-ES, GW-12, GW-5R, GW-18, SDW-7S, GW-16, GW-16R, GW-19, GW-6R, GW-14, GW-21, PTA1, PTA1-EXT, GW-ND, GW-23	Primarily weathered and/or water-washed SRG, weathered kerosene-like mid-range distillate and/or crude oil occasionally present in minor amounts	0-2	0.1-1.5	Primarily the WSF of gasoline, with occasional minor amounts of kerosene-like mid-range distillate and/or crude oil	Pipeline release area / Kerosene sourced from area near GW-C and GW-D / Localized crude oil sources
North-central portion of former tank farm	P2RI-7, LSSI-27, LSSI-5, LSSI-15, LSSI-6, LSSI-8, LSSI-9, LSSI-9R, LSSI-16, LSSI-16R, LSSI-7, GW-K, LSSI-10, LSSI-12, LSSI-19	Primarily weathered and/or water-washed SRG, traces of gas oil or crude	0.5-1	0.1-1	WSF of gasoline	Pipeline release area / Localized gas oil or crude sources
Northwest portion of former tank farm	LSSI-28, P2RI-6, LSSI-29, LSSI-32, LSSI-38, P2RI-4S, P2RI-43S, LSSI-36, GW-C-29, P2RI-45E, P2RI-45S, GW-C-47S, P2RI-5S, P2RI-5, P2RI-46S	Primarily weathered and/or water-washed SRG, crude oil and/or kerosene-like middle distillate occasionally present in minor amounts	1-3	0.01-3	Approximately equal proportions of the WSF of gasoline, kerosene, and crude oil	Pipeline release area / Tank failure in western tank farm / Kerosene sourced from area near GW-C and GW-D / Localized crude oil source at LSSI-36
Northwest field, former Simmes property	SDW-5, SDW-20D, SDW-31, SDW-24D, SDW-21D, SDW-25D	Minimally weathered SRG	2-4	~2; little or no groundwater present	WSF of gasoline	Pipeline release area / Tank failure in western tank farm
Head of Surface Drainage 1	SD01-TP-01, SD01-TP-03	None present	N/A	0-1	unknown / not sampled	Pipeline release area / Tank failure in western tank farm / Localized source area
Tank Berm 10	TB10-RW, P2RI-42S	Extremely weathered crude oil	~0	unknown / not sampled	unknown / not sampled	Localized source area
Tank Berm 18	None	Extremely weathered crude oil or tank bottom residue	0.027	0; LNAPL/sludge on ground surface only	unknown / not sampled	Localized source area
Tank Berm 23	None	Moderately weathered crude oil emulsified with groundwater	~0	0.01	Microdroplets and emulsions of crude oil	Localized source area
Immediate area around PA-1	PA-1	Extremely weathered crude oil	0.49	0.5	unknown / not sampled	Localized source area
Lakebed east of former refinery property	P2RI-53S, P2RI-60S	None present; closest LNAPL well is PA-1	N/A	0.02-0.15	unknown / not sampled	Localized source area / Municipal waste

Notes:
LNAPL - Light non-aqueous phase liquid
WSF - Water soluble fraction
SRG - Straight run gas, also called naphtha
N/A - Not applicable

FIGURES



N

0 1,200'

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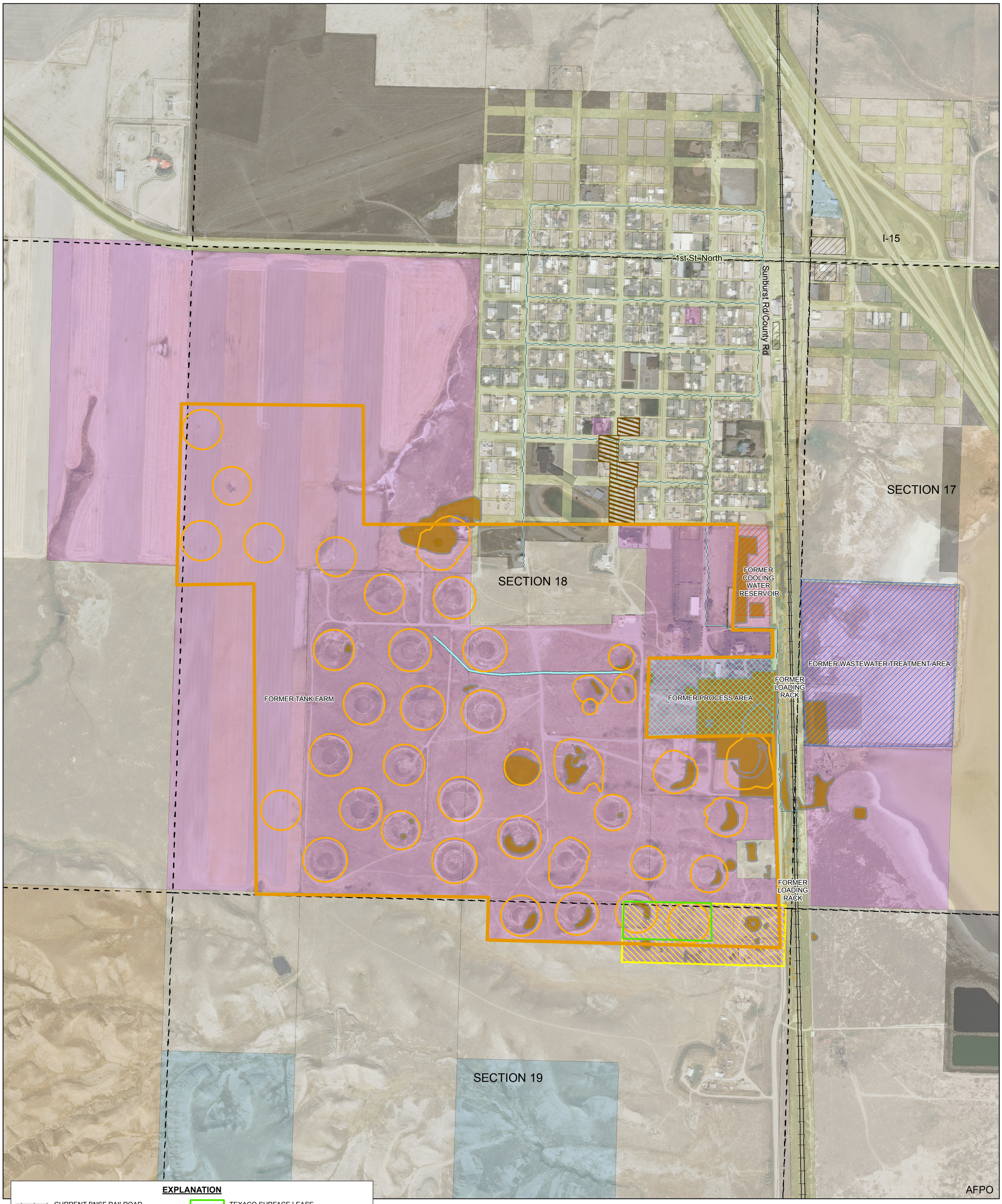
FIGURE 1.2-1

FACILITY LOCATION MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: PH	Checked By: PH	Scale: 1" = 1200'	Date: 08/27/12	File: Sunburst_PhaseII_LocationMap.mxd



EXPLANATION

- CURRENT BNSF RAILROAD
- FORMER BNSF RAILROAD
- LEAKING PIPELINE - 1955
- WATER MAINS
- TANK BERMS
- CHEVRON REMEDIAL EXCAVATIONS
- WET REMEDIAL EXCAVATION
- LEAKING UNDERGROUND STORAGE TANK PARCEL
- SECTION LINES
- SNOW CAP REFINERY
- TEXACO SURFACE LEASE
- FORMER COOLING WATER RESERVOIR
- FORMER PROCESS AREA
- FORMER TANK FARM
- FORMER WASTEWATER TREATMENT AREA

LAND OWNERSHIP

- CHEVRON
- LOCAL GOVERNMENT
- PRIVATE
- RIGHT OF WAY
- STATE GOVERNMENT
- USDI BUREAU OF LAND MANAGEMENT

N

0 250 500'

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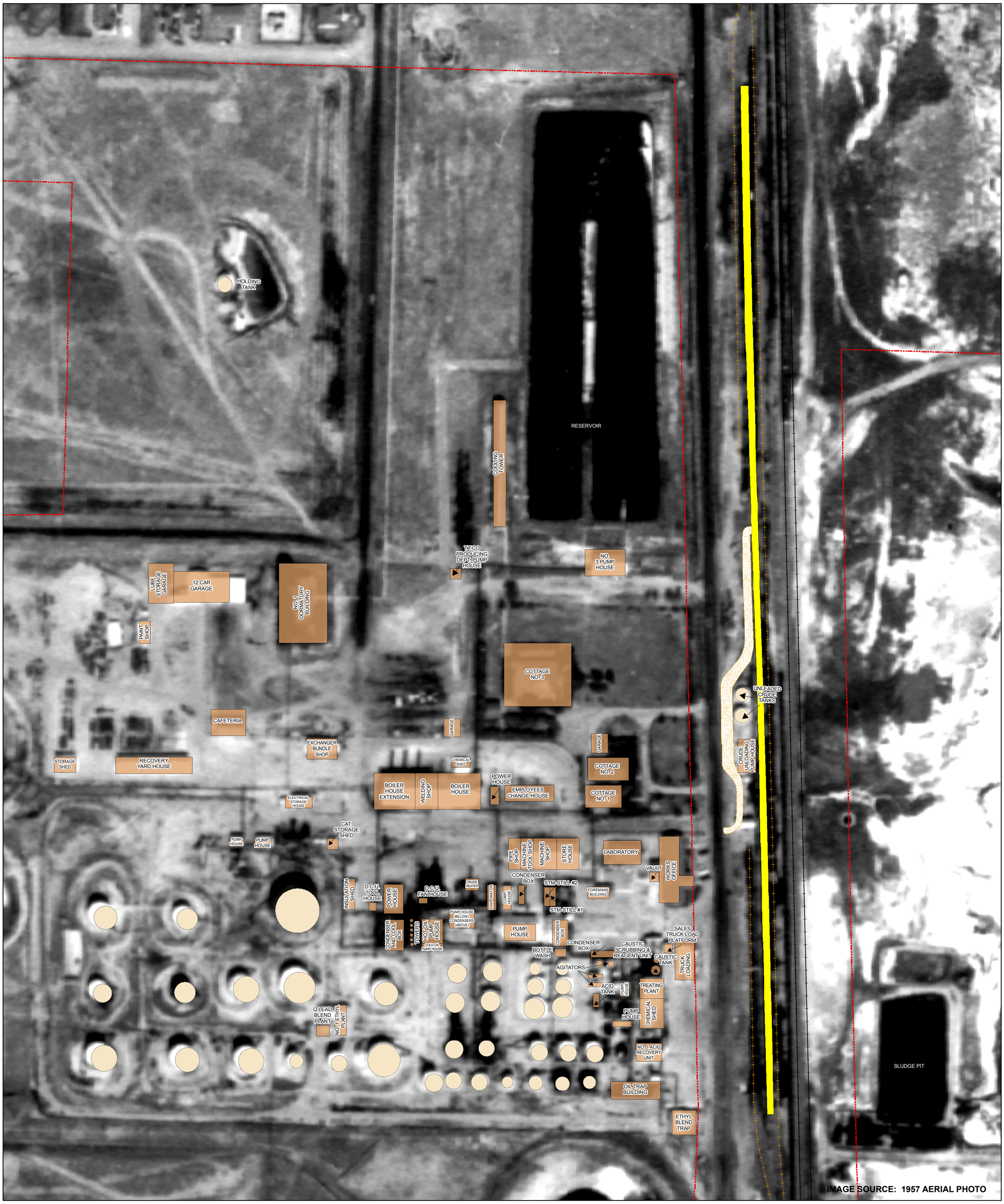
FIGURE 1.2-2

GENERAL AREAS, CURRENT PROPERTY OWNERSHIP AND DOCUMENTED PETROLEUM RELEASE SITES

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: PH	Checked By: PH	Scale: 1" = 500'	Date: 08/27/12	File: Sunburst_PhaseII_GeneralAreas.mxd



EXPLANATION

- CURRENT BNSF RAILROAD
- FORMER BNSF RAILROAD
- HISTORICAL STRUCTURES
- FORMER REFINERY TANKS
- GUNITED BANK
- LOADING RACK
- PROPERTY BOUNDARY

N

0 50 100'

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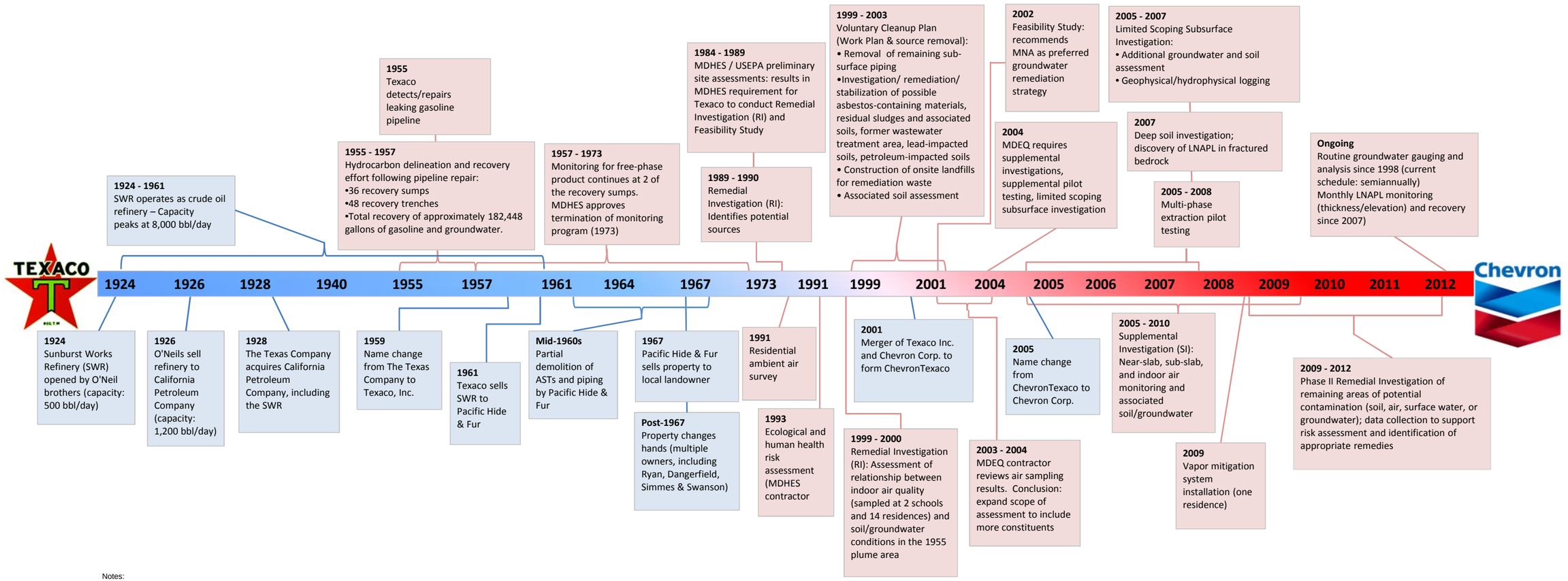
FIGURE 1.2-3

FORMER REFINERY BUILDINGS

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: AC	Checked By: TF	Scale: 1" = 100'	Date: 08/27/12	File: Sunburst_PhaseII_Buildings.mxd

FIGURE 1.4-1. OPERATING HISTORY TIMELINE
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



Notes:
bbl/day - barrels per day
ASTs - above-ground storage tanks
LNAPL - light non-aqueous phase liquid
MDHES - Montana Department of Health & Environmental Sciences (predecessor agency to MDEQ)
MDEQ - Montana Department of Environmental Quality
MNA - monitored natural attenuation
RI - Remedial Investigation
SI - Supplemental Investigation
SWR - Sunburst Works Refinery
USEPA - United States Environmental Protection Agency

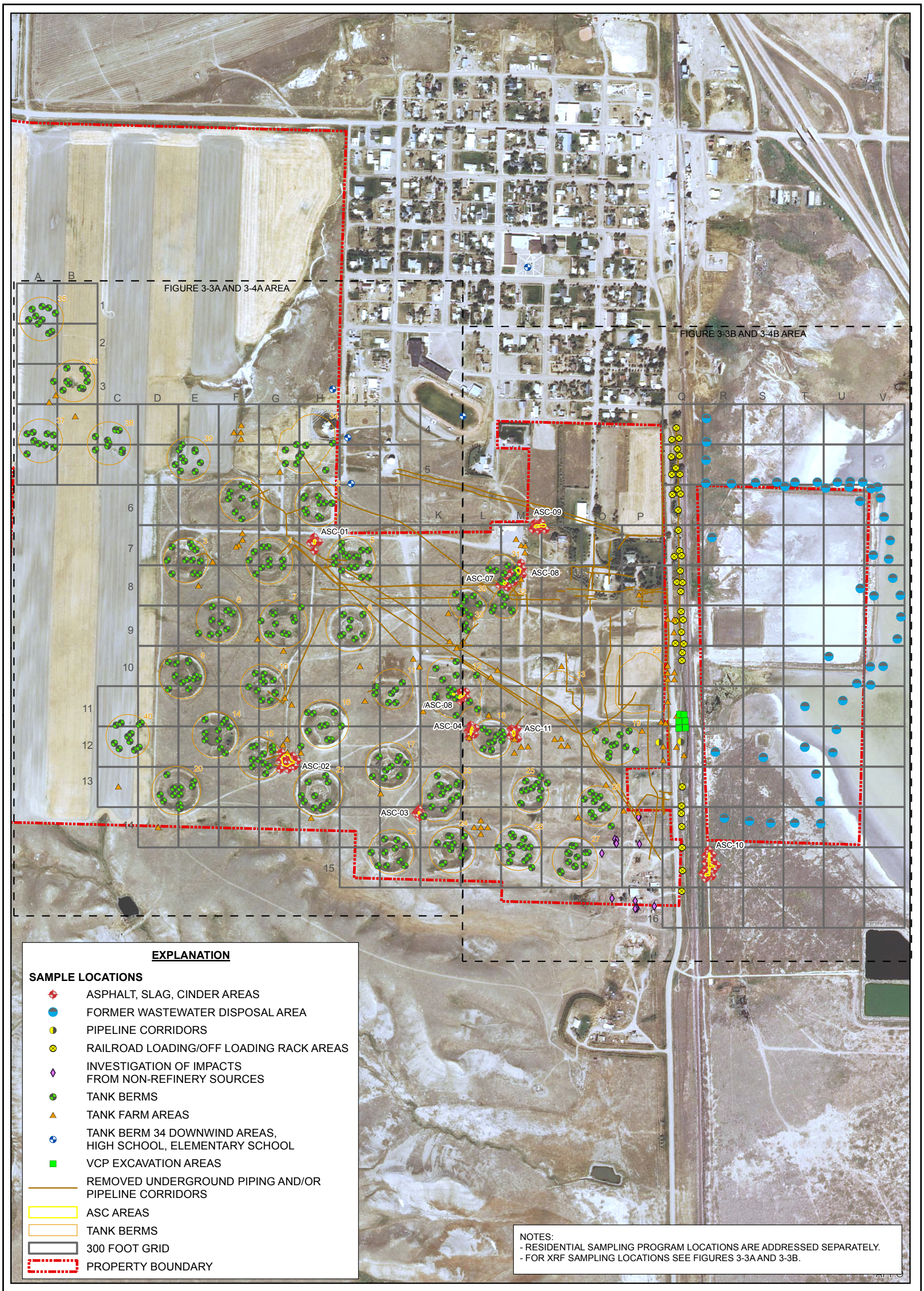


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FIGURE 3-1

SURFACE SOIL SAMPLING OVERVIEW MAP

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: PH	Checked By: CD	Scale: 1" = 700'	Date: 05/23/13	File: Sunburst_PhaseII_SurfaceMaster.mxd

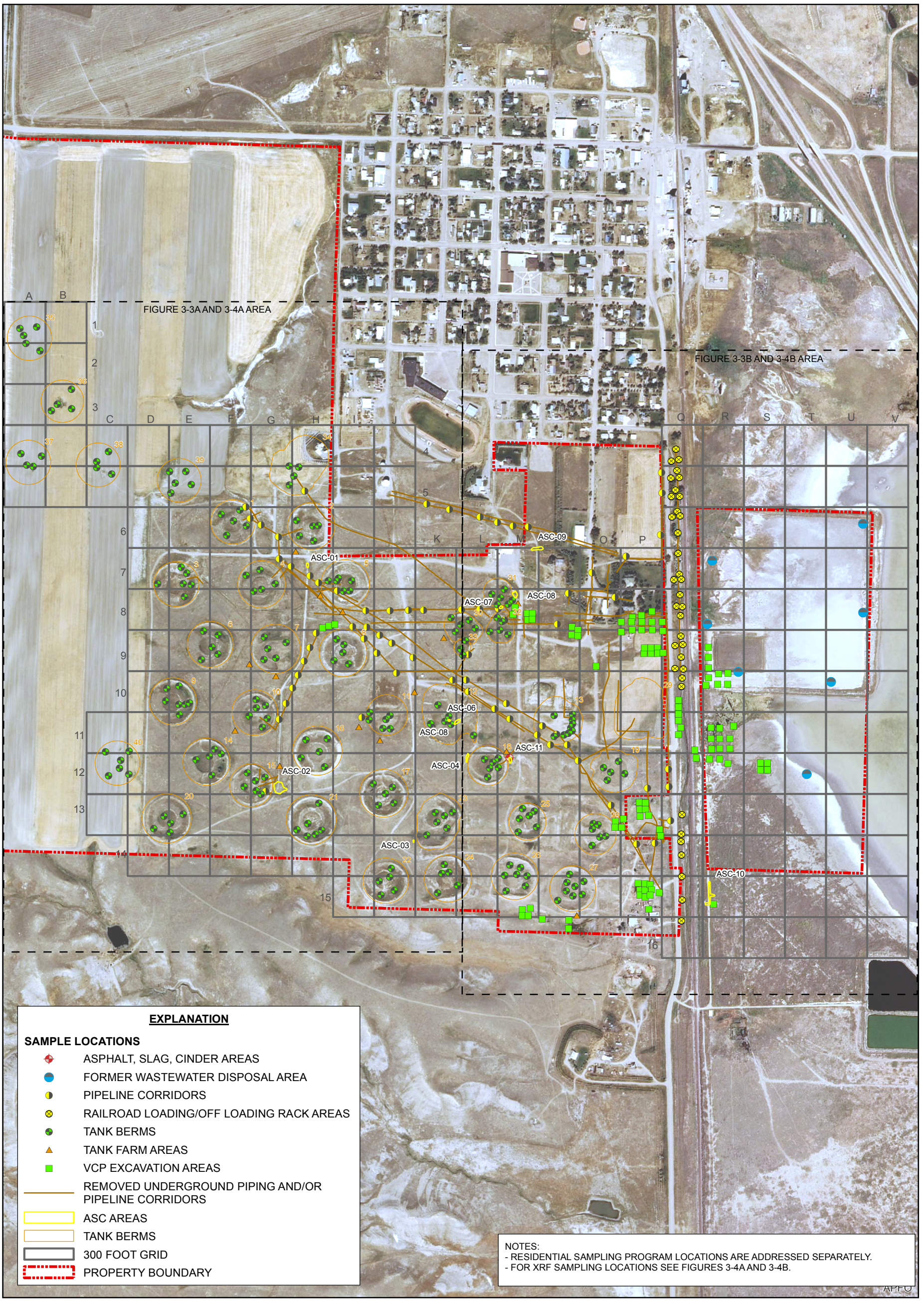

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FIGURE 3-2

SUBSURFACE SOIL SAMPLING OVERVIEW MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: PH	Checked By: CD	Scale: 1" = 700'	Date: 05/23/13	File: Sunburst_PhaseII_SubSurfaceMaster_2013upd

NOTES:
- LOCATIONS SHOWN ARE THOSE WHERE SAMPLES FOR FIELD XRF OR LABORATORY ANALYSIS WERE COLLECTED; AT SOME LOCATIONS, SAMPLES WERE COLLECTED FROM MULTIPLE DEPTHS.
- SURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 0 TO 2 FT-BGS.
- SUBSURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 2 FT-BGS AND DEEPER.
- IN A FEW CASES, THE SAMPLING INTERVAL STRADDLED 2 FT-BGS (E.G. 1.5 TO 3.5 FT-BGS); THOSE SAMPLES WERE DEFINED AS SURFACE SAMPLES.
- EVALUATION OF CONSTITUENTS OF INTEREST (COI) LIST INORGANICS WAS LIMITED TO ANTIMONY, BARIUM, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, CYANIDE, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, AND ZINC.
- COI LIST PROVIDED IN TABLE 2.1-1.
- APPLICABLE SOILS SCREENING LEVELS PROVIDED IN TABLE 2.1-1; RATIONALE FOR SCREENING LEVELS DISCUSSED IN SECTION 2.3.1 OF THE TEXT.
- COMPLETE ANALYTICAL RESULTS PROVIDED IN APPENDIX 3-A.
- SOME SAMPLES WERE ANALYZED FOR A SUBSET OF THE COI LIST; FOR EXAMPLE, AT LOCATIONS WHERE SAMPLES WERE COLLECTED FOR THE PURPOSE FURTHER DELINEATING PREVIOUSLY OBSERVED IMPACTS, THE CONSTITUENT LIST TYPICALLY TARGETED THE TYPES OF IMPACTS OBSERVED IN THE INITIAL SAMPLE(S). SUCH SAMPLES GENERALLY CONTAIN AN –S1- OR -S2- DESIGNATION WITHIN THE PROGRAM ABBREVIATION PORTION OF THE LOCATION ID.

EXPLANATION

- ALL COI LIST ANALYTE CONCENTRATIONS MET THE APPLICABLE SCREENING LEVELS
- ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST SVOC/EPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST VOC/VPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- XRF LEAD BELOW THE SCREENING LEVEL (400 MG/KG)
- XRF LEAD ≥ 400 MG/KG
- REMOVED UNDERGROUND PIPING AND/OR PIPELINE CORRIDORS
- ASC AREAS
- 300 FOOT GRID
- TANK BERMS
- PROPERTY BOUNDARY

N

0 150 300 '

APFO FSA

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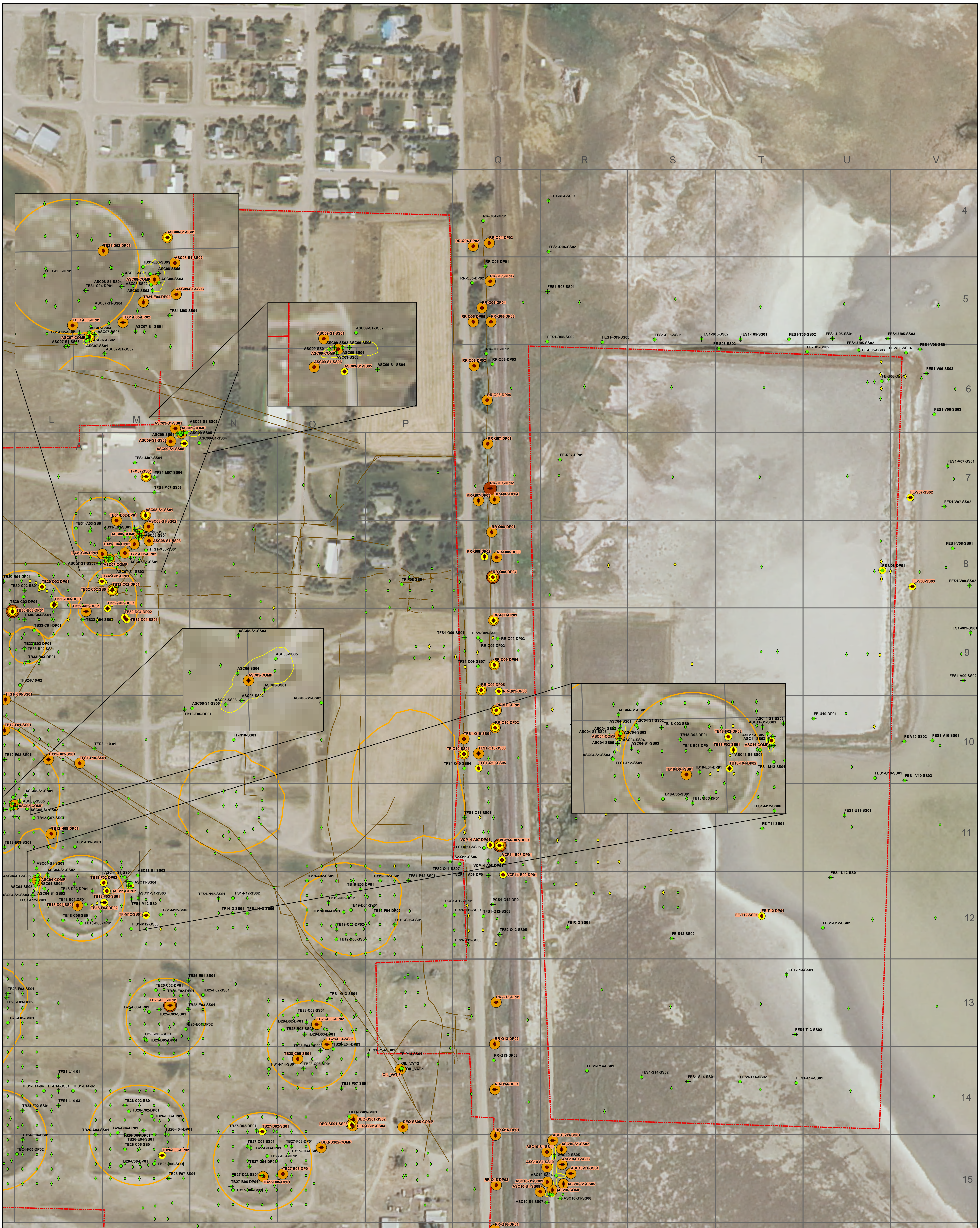
FIGURE 3-3A

SUMMARY OF ANALYTICAL RESULTS SURFACE SOIL - WEST

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: PH	Checked By: CD	Scale: 1" = 150'	Date: 11/5/13	File: Sunburst_PhaseII_SurfaceSoilW.mxd



NOTES:
- LOCATIONS SHOWN ARE THOSE WHERE SAMPLES FOR FIELD XRF OR LABORATORY ANALYSIS WERE COLLECTED; AT SOME LOCATIONS, SAMPLES WERE COLLECTED FROM MULTIPLE DEPTHS.
- SURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 0 TO 2 FT-BGS.
- SUBSURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 2 FT-BGS AND DEEPER.
- IN A FEW CASES, THE SAMPLING INTERVAL STRADDLED 2 FT-BGS (E.G. 1.5 TO 3.5 FT-BGS); THOSE SAMPLES WERE DEFINED AS SURFACE SAMPLES.
- EVALUATION OF CONSTITUENT OF INTEREST (COI) LIST INORGANICS WAS LIMITED TO ANTIMONY, BARIUM, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, CYANIDE, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, AND ZINC.
- COI LIST PROVIDED IN TABLE 2.1-1.
- APPLICABLE SOILS SCREENING LEVELS PROVIDED IN TABLE 2.1-1; RATIONALE FOR SCREENING LEVELS DISCUSSED IN SECTION 2.3.1 OF THE TEXT.
- COMPLETE ANALYTICAL RESULTS PROVIDED IN APPENDIX 3-A.
- ANALYSIS OF DEQ-PREFIX AND OIL-VAT-PREFIX SAMPLES INCLUDED AN EXTENDED ANALYTE LIST FOR PROPERTY CHARACTERIZATION PURPOSES. APPENDIX 3-A PROVIDES RESULTS FOR THE NON-COI LIST CONSTITUENTS.
- SOME SAMPLES WERE ANALYZED FOR A SUBSET OF THE COI LIST; FOR EXAMPLE, AT LOCATIONS WHERE SAMPLES WERE COLLECTED FOR THE PURPOSE FURTHER DELINEATING PREVIOUSLY OBSERVED IMPACTS, THE CONSTITUENT LIST TYPICALLY TARGETED THE TYPES OF IMPACTS OBSERVED IN THE INITIAL SAMPLE(S). SUCH SAMPLES GENERALLY CONTAIN AN –S1- OR -S2- DESIGNATION WITHIN THE PROGRAM ABBREVIATION PORTION OF THE LOCATION ID.

EXPLANATION

- ALL COI LIST ANALYTE CONCENTRATIONS MET THE APPLICABLE SCREENING LEVELS
- XRF LEAD BELOW THE SCREENING LEVEL (400 MG/KG)
- XRF LEAD ≥ 400 MG/KG
- ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST SVOC/EPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST VOC/VPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- REMOVED UNDERGROUND PIPING AND/OR PIPELINE CORRIDORS
- ASC AREAS
- 300 FOOT GRID
- TANK BERMS
- PROPERTY BOUNDARY

N

0 150 300'

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FIGURE 3-3B

SUMMARY OF ANALYTICAL RESULTS SURFACE SOIL - EAST

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: PH	Checked By: CD	Scale: 1" = 150'	Date: 11/6/13	File: Sunburst_PhaseII_SurfaceSoilE_2013upd.mxd

NOTES:
- LOCATIONS SHOWN ARE THOSE WHERE SAMPLES FOR FIELD XRF OR LABORATORY ANALYSIS WERE COLLECTED; AT SOME LOCATIONS, SAMPLES WERE COLLECTED FROM MULTIPLE DEPTHS.
- SURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 0 TO 2 FT-BGS.
- SUBSURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 2 FT-BGS AND DEEPER.
- IN A FEW CASES, THE SAMPLING INTERVAL STRADDLED 2 FT-BGS (E.G. 1.5 TO 3.5 FT-BGS); THOSE SAMPLES WERE DEFINED AS SURFACE SAMPLES.
- EVALUATION OF CONSTITUENTS OF INTEREST (COI) LIST INORGANICS WAS LIMITED TO ANTIMONY, BARIUM, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, CYANIDE, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, AND ZINC.
- COI LIST PROVIDED IN TABLE 2.1-1.
- APPLICABLE SOILS SCREENING LEVELS PROVIDED IN TABLE 2.1-1; RATIONALE FOR SCREENING LEVELS DISCUSSED IN SECTION 2.3.1 OF THE TEXT.
- COMPLETE ANALYTICAL RESULTS PROVIDED IN APPENDIX 3-A.
- SOME SAMPLES WERE ANALYZED FOR A SUBSET OF THE COI LIST; FOR EXAMPLE, AT LOCATIONS WHERE SAMPLES WERE COLLECTED FOR THE PURPOSE FURTHER DELINEATING PREVIOUSLY OBSERVED IMPACTS, THE CONSTITUENT LIST TYPICALLY TARGETED THE TYPES OF IMPACTS OBSERVED IN THE INITIAL SAMPLE(S). SUCH SAMPLES GENERALLY CONTAIN AN –S1- OR -S2- DESIGNATION WITHIN THE PROGRAM ABBREVIATION PORTION OF THE LOCATION ID.

EXPLANATION

- ALL COI LIST ANALYTE CONCENTRATIONS MET THE APPLICABLE SCREENING LEVELS
- XRF LEAD BELOW THE SCREENING LEVEL (400 MG/KG)
- XRF LEAD ≥ 400 MG/KG
- ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST SVOC/EPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST VOC/VPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- REMOVED UNDERGROUND PIPING AND/OR PIPELINE CORRIDORS
- ASC AREAS
- 300 FOOT GRID
- TANK BERMS
- PROPERTY BOUNDARY

N

0 150 300 '

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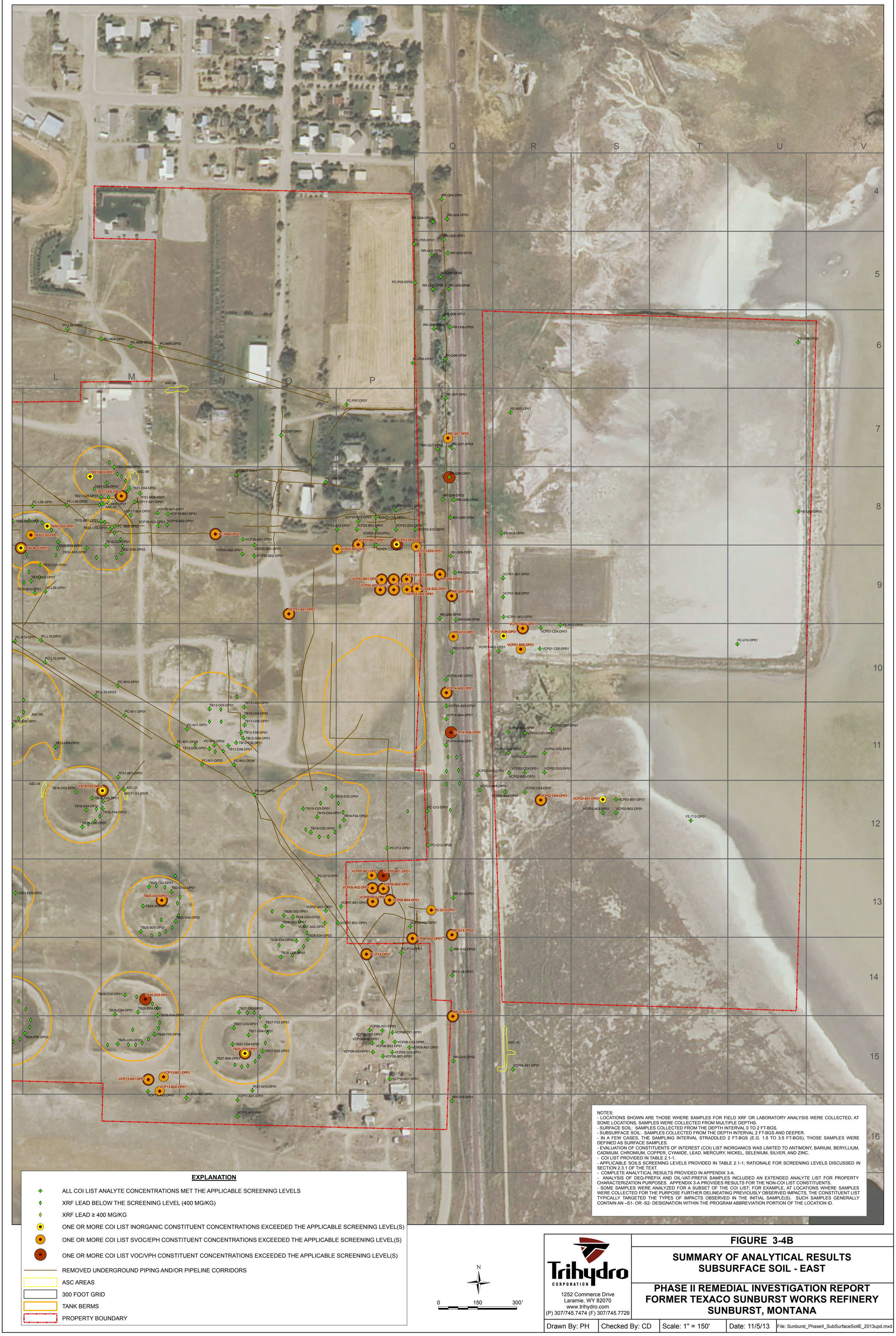
FIGURE 3-4A

SUMMARY OF ANALYTICAL RESULTS SUBSURFACE SOIL - WEST

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: PH	Checked By: CD	Scale: 1" = 150'	Date: 11/5/13	File: Sunburst_PhaseII_SubSurfaceSoilW_2013upd.mxd



NOTES:
- LOCATIONS SHOWN ARE THOSE WHERE SAMPLES FOR FIELD XRF OR LABORATORY ANALYSIS WERE COLLECTED; AT SOME LOCATIONS, SAMPLES WERE COLLECTED FROM MULTIPLE DEPTHS.
- SURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 0 TO 2 FT-BGS.
- SUBSURFACE SOIL: SAMPLES COLLECTED FROM THE DEPTH INTERVAL 2 FT-BGS AND DEEPER.
- IN A FEW CASES, THE SAMPLING INTERVAL STRADDLED 2 FT-BGS (E.G. 1.5 TO 3.5 FT-BGS); THOSE SAMPLES WERE DEFINED AS SURFACE SAMPLES.
- EVALUATION OF CONSTITUENTS OF INTEREST (COI) LIST INORGANICS WAS LIMITED TO ANTIMONY, BARIUM, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, CYANIDE, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, AND ZINC.
- COI LIST PROVIDED IN TABLE 2.1-1.
- APPLICABLE SOILS SCREENING LEVELS PROVIDED IN TABLE 2.1-1; RATIONALE FOR SCREENING LEVELS DISCUSSED IN SECTION 2.3.1 OF THE TEXT.
- COMPLETE ANALYTICAL RESULTS PROVIDED IN APPENDIX 3-A.
- ANALYSIS OF DEQ-PREFIX AND OIL-VAT-PREFIX SAMPLES INCLUDED AN EXTENDED ANALYTE LIST FOR PROPERTY CHARACTERIZATION PURPOSES. APPENDIX 3-A PROVIDES RESULTS FOR THE NON-COI LIST CONSTITUENTS.
- SOME SAMPLES WERE ANALYZED FOR A SUBSET OF THE COI LIST; FOR EXAMPLE, AT LOCATIONS WHERE SAMPLES WERE COLLECTED FOR THE PURPOSE FURTHER DELINEATING PREVIOUSLY OBSERVED IMPACTS, THE CONSTITUENT LIST TYPICALLY TARGETED THE TYPES OF IMPACTS OBSERVED IN THE INITIAL SAMPLE(S). SUCH SAMPLES GENERALLY CONTAIN AN –S1- OR -S2- DESIGNATION WITHIN THE PROGRAM ABBREVIATION PORTION OF THE LOCATION ID.

EXPLANATION

- ALL COI LIST ANALYTE CONCENTRATIONS MET THE APPLICABLE SCREENING LEVELS
- XRF LEAD BELOW THE SCREENING LEVEL (400 MG/KG)
- XRF LEAD ≥ 400 MG/KG
- ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST SVOC/EPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- ONE OR MORE COI LIST VOC/VPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- REMOVED UNDERGROUND PIPING AND/OR PIPELINE CORRIDORS
- ASC AREAS
- 300 FOOT GRID
- TANK BERMS
- PROPERTY BOUNDARY

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FIGURE 3-4B

SUMMARY OF ANALYTICAL RESULTS SUBSURFACE SOIL - EAST

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: PH	Checked By: CD	Scale: 1" = 150'	Date: 11/5/13	File: Sunburst_PhaseII_SubSurfaceSoilE_2013upd.mxd

NOTES:
- LOCATIONS SHOWN ARE THOSE WHERE SAMPLES FOR FIELD XRF OR LABORATORY ANALYSIS WERE COLLECTED; AT SOME LOCATIONS, SAMPLES FOR ANALYSIS OF INORGANICS WERE COLLECTED FROM MULTIPLE DEPTHS; ALL SAMPLES WERE FROM SURFACE SOIL (0-2 FT-BGS).
- EVALUATION OF CONSTITUENT OF INTEREST (COI) LIST INORGANICS WAS LIMITED TO ANTIMONY, BARIUM, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, CYANIDE, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, AND ZINC.
- COI LIST PROVIDED IN TABLE 2.1-1.
- COMPLETE ANALYTICAL RESULTS PROVIDED IN APPENDIX 3-A.
- CONSTITUENT CONCENTRATION IN SAMPLES FOR LABORATORY ANALYSIS MET THE APPLICABLE SCREENING LEVELS AT EACH IDENTIFIED LOCATION.

EXPLANATION

- XRF LEAD BELOW THE SCREENING LEVEL (400 MG/KG)
- SAMPLE LOCATION (LABORATORY ANALYSIS) TANK BERM 34 DOWNWIND AREA INVESTIGATION
- TANK BERM 34 DOWNWIND EX-SITU LOCATION
- REMOVED UNDERGROUND PIPING AND/OR PIPELINE CORRIDORS
- TANK BERM
- PROPERTY BOUNDARY

N

0 200'

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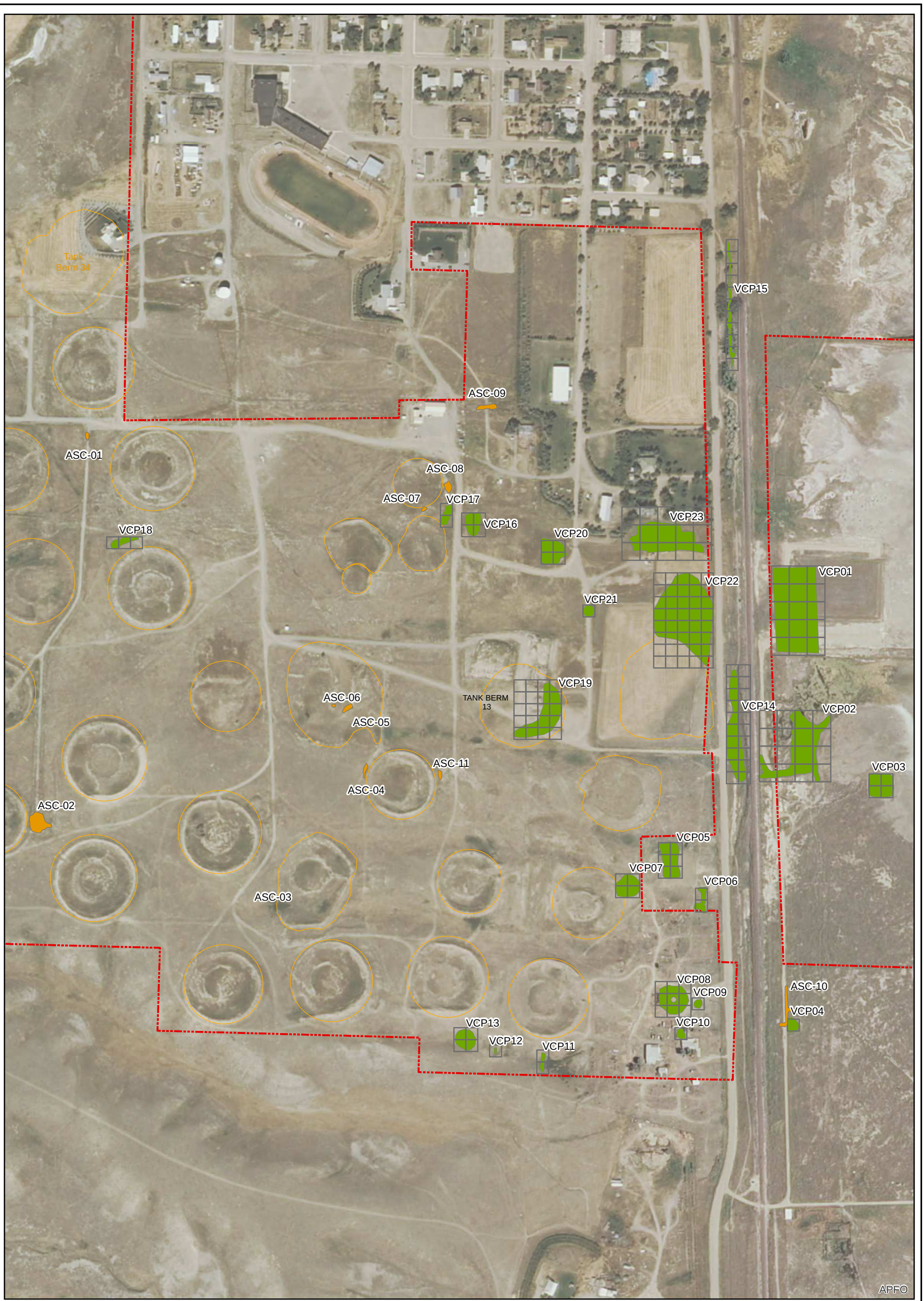
FIGURE 3.4-1

TANK BERM 34 DOWNWIND AREA SOIL SAMPLING

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: PH	Checked By: CD	Scale: 1" = 200'	Date: 11/4/13	File: Sunburst_PhaseII_TB34DW.mxd



EXPLANATION

- ASC AREAS
- VCP GRID
- VCP AREAS
- TANK BERMS
- PROPERTY BOUNDARY

N

0 400'

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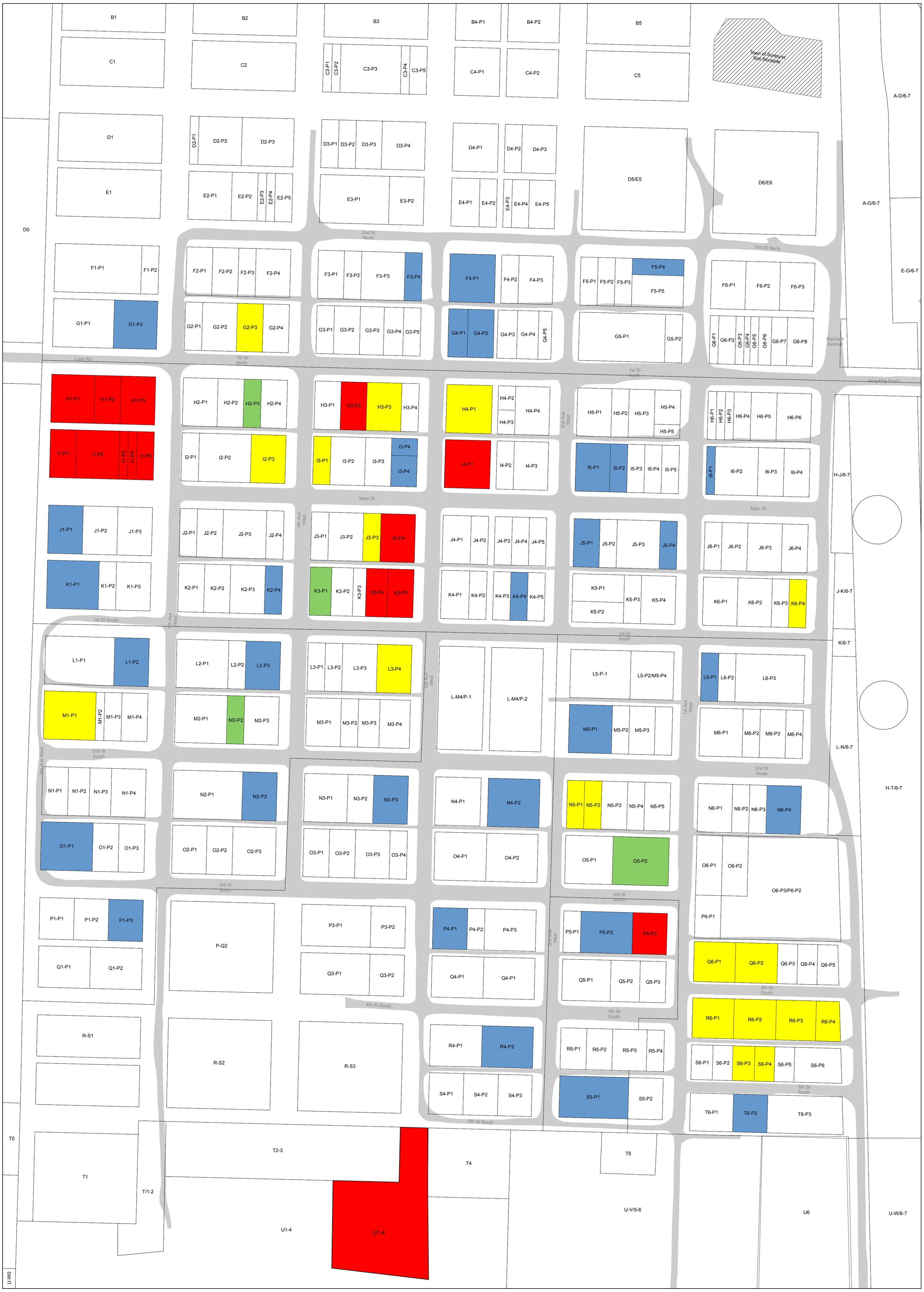
FIGURE 3.6-1

SAMPLING GRID FOR VCP EXCAVATION AREAS

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: PH	Checked By: CD	Scale: 1" = 400'	Date: 05/23/13	File: Sunburst_PhaseII_VCP.mxd



EXPLANATION

- TOWN OF SUNBURST SOIL STOCKPILE
- ROADS

RESIDENTIAL SOIL INVESTIGATION

- SUNBURST OWNERSHIP GRID
- PROPERTY SELECTED FOR RANDOM SAMPLING PROGRAM
- PROPERTY CONTAINS BACKFILL SOILS FROM A SOURCE OTHER THAN THE FORMER REFINERY
- PROPERTY CONTAINS BACKFILL SOILS FROM THE FORMER REFINERY
- PROPERTY CONTAINS BACKFILL SOILS FROM AN UNKNOWN SOURCE

N

0 120 240'

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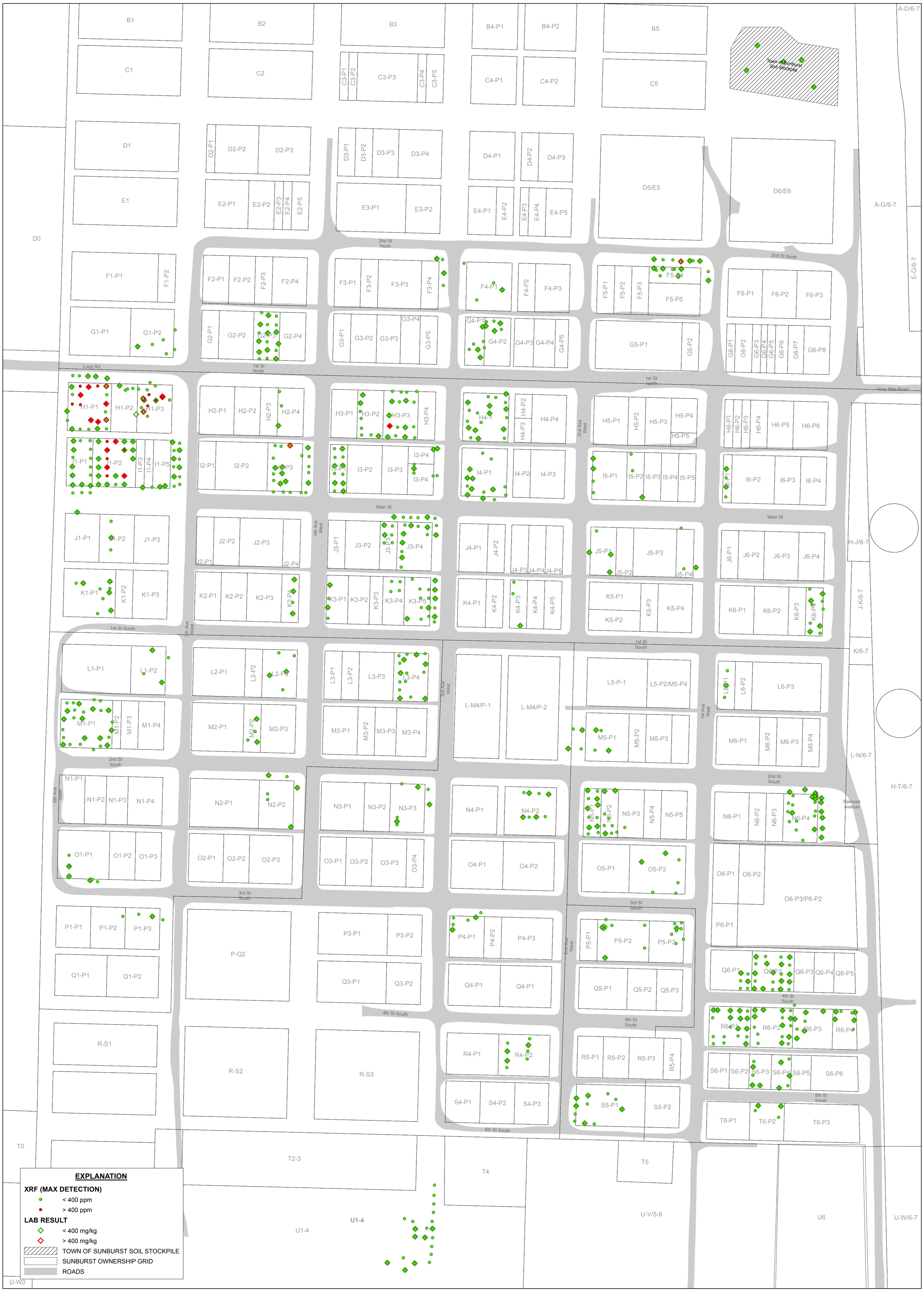
FIGURE 3.10-1

TOWN OF SUNBURST
BLOCK GRID

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JH	Checked By: JM	Scale: 1" = 120'	Date: 03/07/12	File: Sunburst_PhaseII_BlockGrid.mxd



EXPLANATION

XRF (MAX DETECTION)

- < 400 ppm
- > 400 ppm

LAB RESULT

- < 400 mg/kg
- > 400 mg/kg
- TOWN OF SUNBURST SOIL STOCKPILE
- SUNBURST OWNERSHIP GRID
- ROADS

NOTES:
1. RESULTS SHOWN ARE FROM THE RESIDENTIAL SOIL INVESTIGATION STUDY ONLY
2. SYMBOLS REFLECT HIGHEST DETECTED CONCENTRATIONS
3. THE SUNBURST OWNERSHIP GRID SHOWS APPROXIMATE PROPERTY BOUNDARIES
4. SAMPLE LOCATIONS APPEARING OUTSIDE OF PROPERTY BOUNDARIES ARE WITHIN THE OWNER'S AREA OF MAINTENANCE
5. ppm - PARTS PER MILLION
6. mg/kg - MILLIGRAMS PER KILOGRAM

N

0 120 240'

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FIGURE 3.10-2

LEAD RESULTS AND SPATIAL DISTRIBUTION

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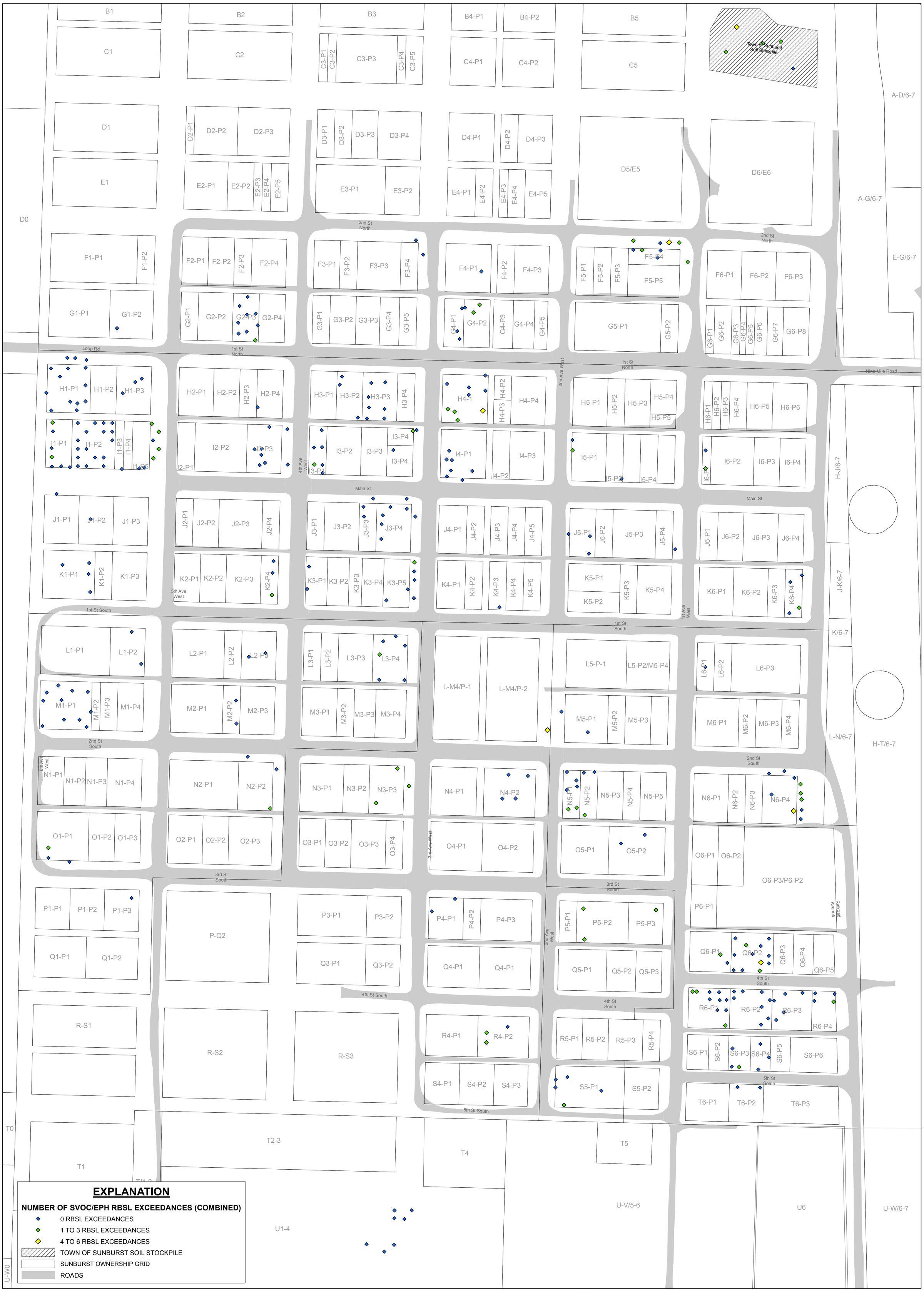
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: JH	Checked By: JM	Scale: 1" = 120'	Date: 03/07/12	File: Sunburst_PhaseII_Lead.mxd



NOTES:
1. SYMBOLS REFLECT THE COMBINED NUMBER OF SVOC/EPH EXCEEDANCES AT EACH LOCATION
2. RESULTS SHOWN ARE FROM THE RESIDENTIAL SOIL INVESTIGATION STUDY ONLY
3. TOTAL NUMBER OF RBSL EXCEEDANCES POSSIBLE PER LOCATION = 32
4. THE SUNBURST OWNERSHIP GRID SHOWS APPROXIMATE PROPERTY BOUNDARIES
5. SAMPLE LOCATIONS APPEARING OUTSIDE OF PROPERTY BOUNDARIES ARE WITHIN THE OWNER'S AREA OF MAINTENANCE
6. RBSL - RISK BASED SCREENING LEVEL

N

0 120 240'

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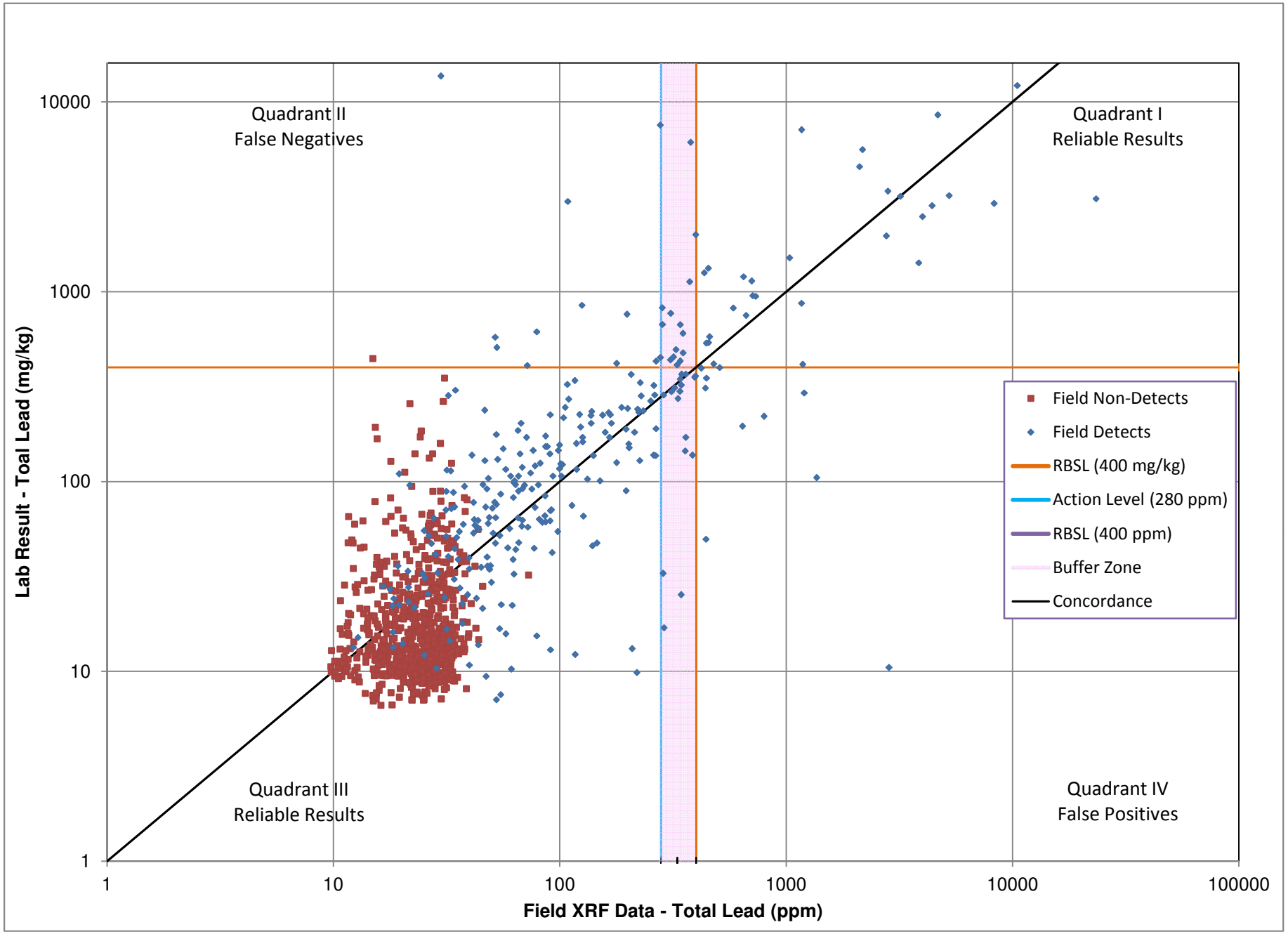
FIGURE 3.10-3

RBSL EXCEEDANCE RESULTS AND SPATIAL DISTRIBUTION (SVOC AND EPH COMBINED)

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: JH	Checked By: JM	Scale: 1" = 120'	Date: 03/07/12	File: Sunburst_PhaseII_RBSL.mxd

FIGURE 3.11-1. CORRELATION BETWEEN XRF FIELD DATA AND LABORATORY RESULTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



EXPLANATION

- LSSI MONITORING WELL
- MONITORING WELL
- RECOVERY WELL
- TEMPORARY MONITORING WELL
- WET MONITORING WELL
- PROPERTY BOUNDARY

N

0 200 400'

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FIGURE 4.1-1

GROUNDWATER MONITORING WELL LOCATIONS

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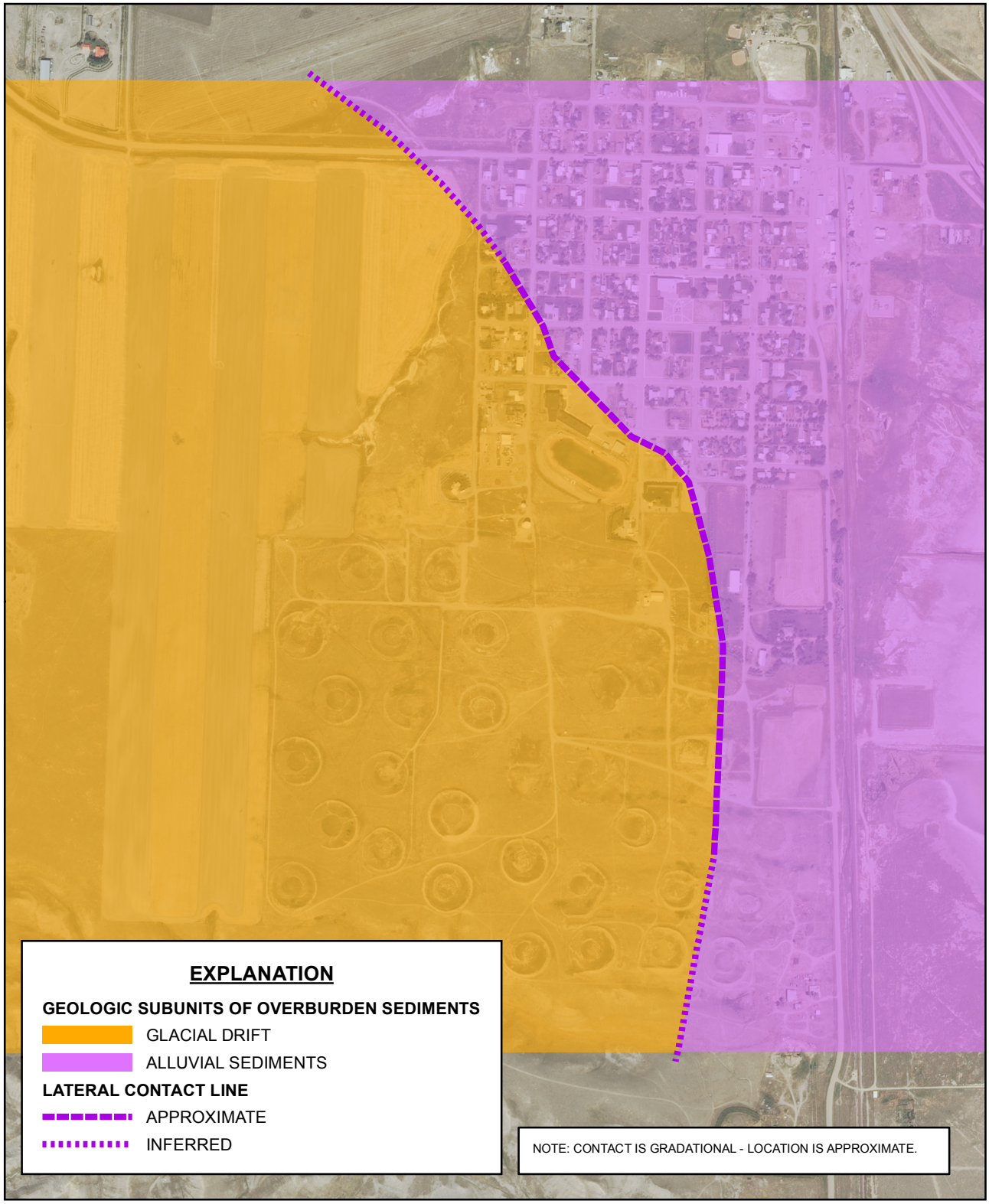
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: PH	Checked By: AC	Scale: 1" = 200'	Date: 11/6/13	File: Sunburst_PhaseII_Figure4.1-1_2013upd.mxd



2011 NAIP AERIAL IMAGE

N

0 1,000'

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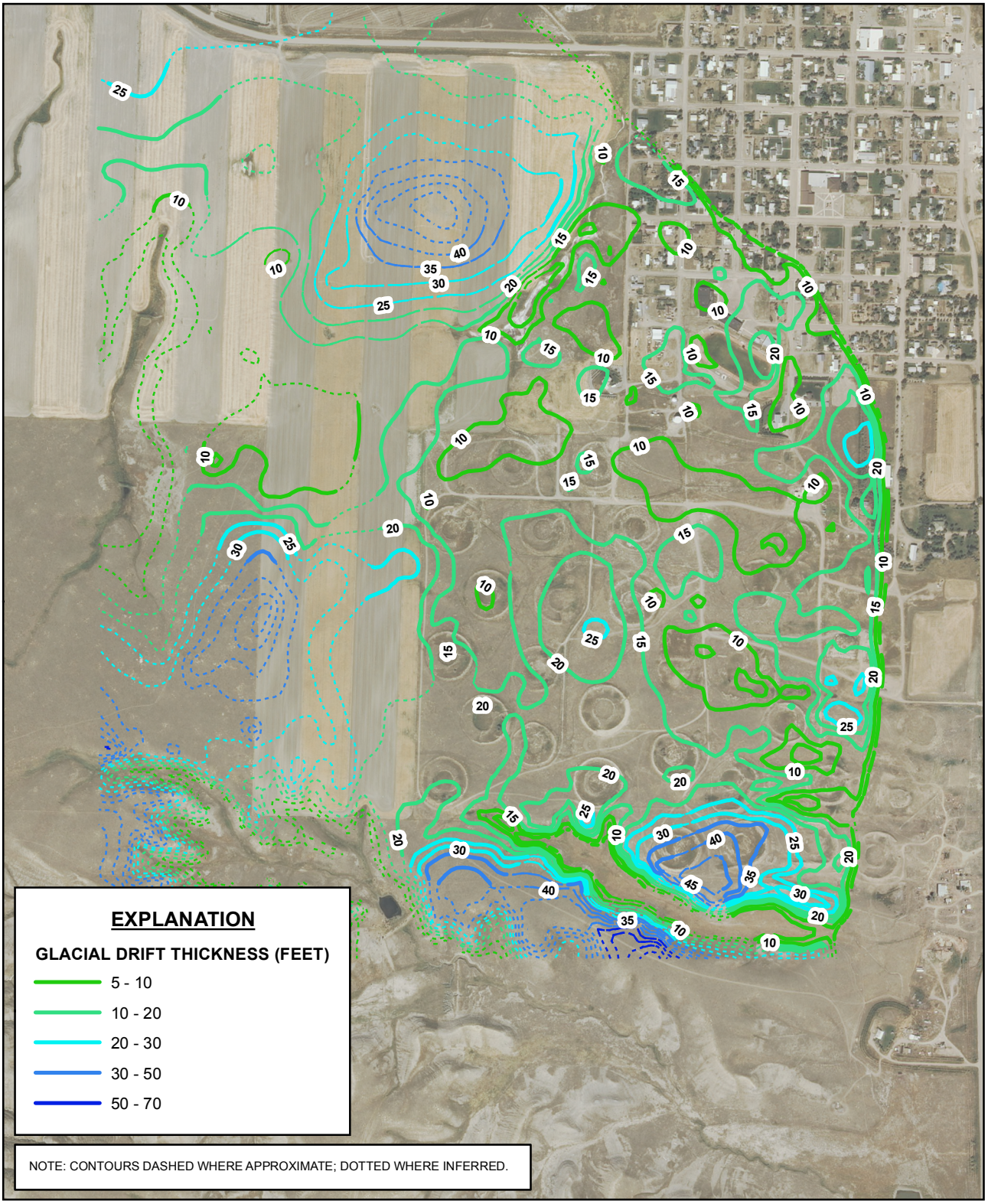
FIGURE 4.5-1

GEOLOGIC SUBUNITS OF OVERBURDEN SEDIMENTS

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1" = 1000'	Date: 9/21/12	File: 201205_Overb_Contact.mxd



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N

0 1,000'

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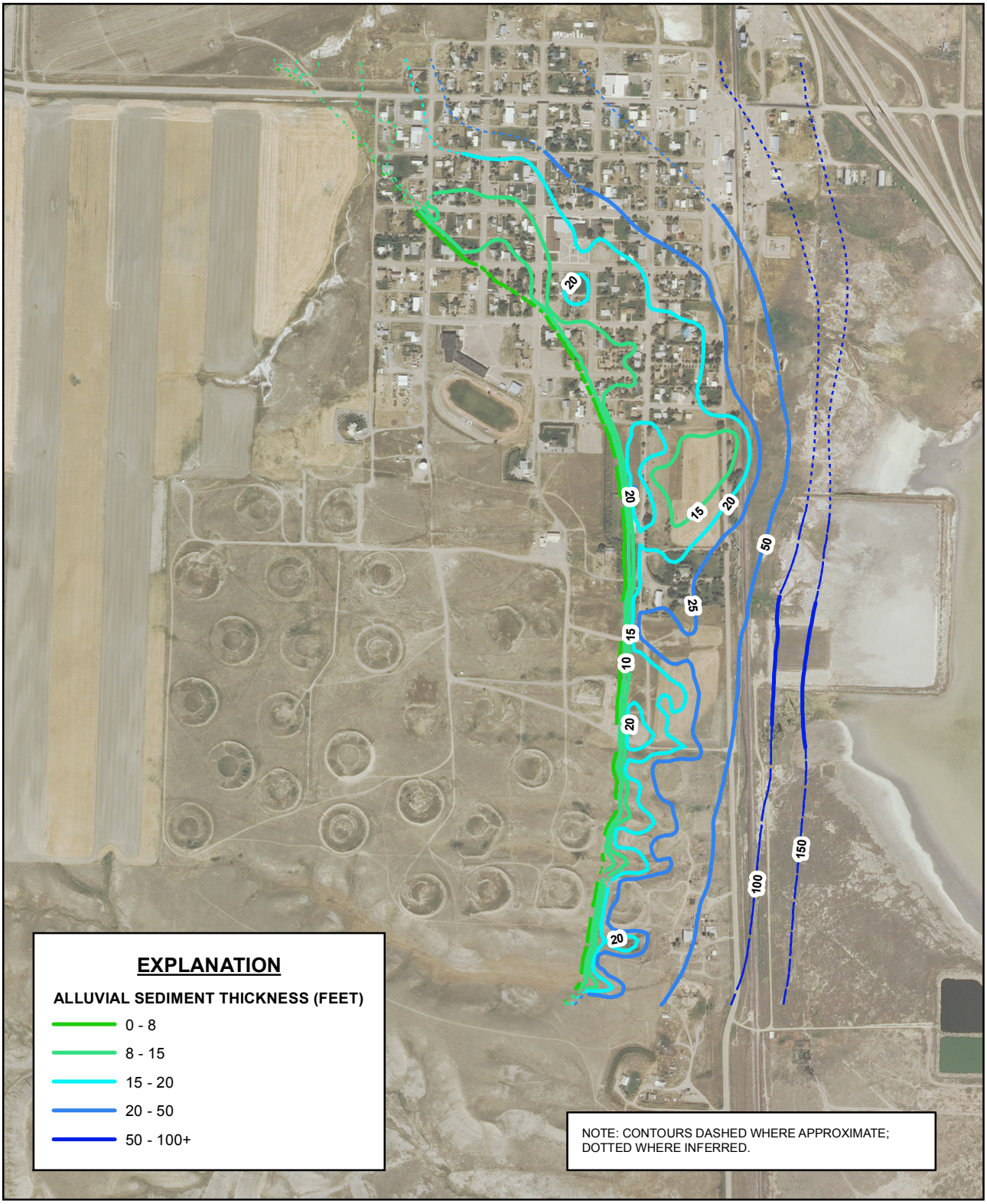
FIGURE 4.5-2

GLACIAL DRIFT ISOPACH MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 1000'	Date: 9/18/12	File: 201206_DOVRB_ISOPACH.mxd



2011 NAIP AERIAL IMAGE

N

0 1,000'

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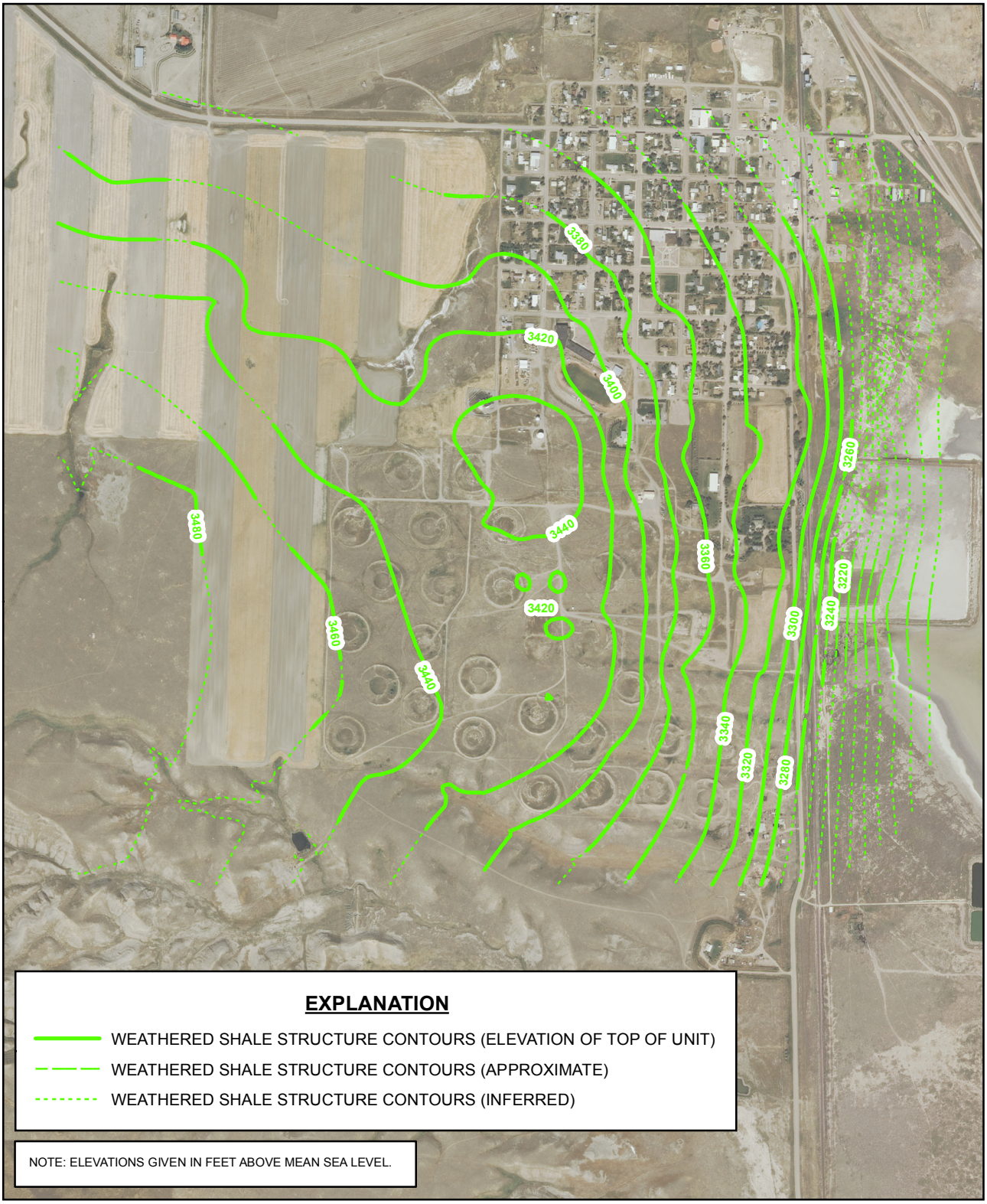
FIGURE 4.5-3

ALLUVIAL SEDIMENTS ISOPACH MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 1000'	Date: 9/18/12	File: 201206_CLOVRB_Isopach.mxd



2011 NAIP AERIAL IMAGE

N

0 1,200 '

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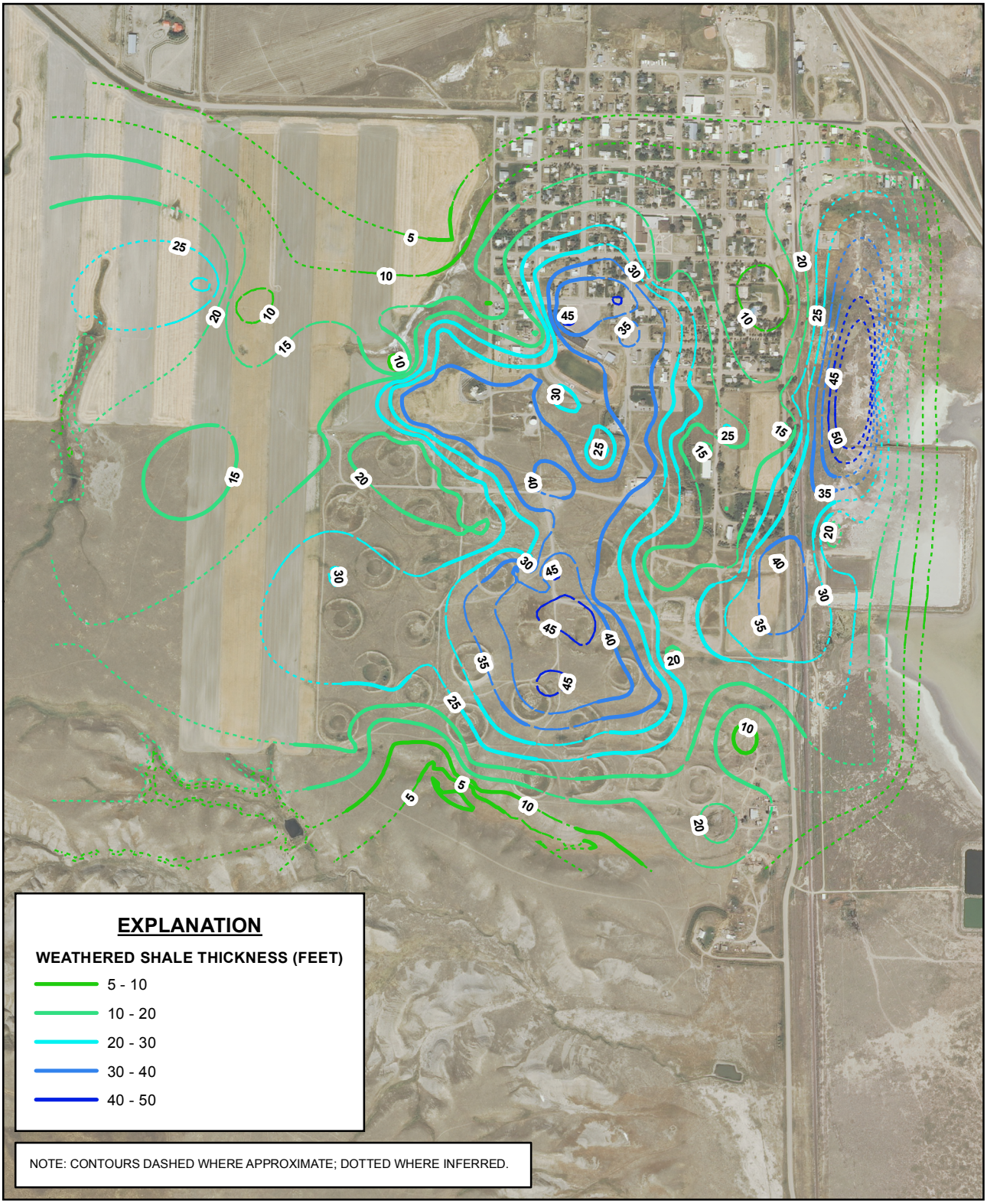
FIGURE 4.5-4

WEATHERED SHALE STRUCTURE CONTOUR MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 1200'	Date: 9/18/12	File: 201206_WShale_Structure.mxd



2011 NAIP AERIAL IMAGE

N

0 1,200'

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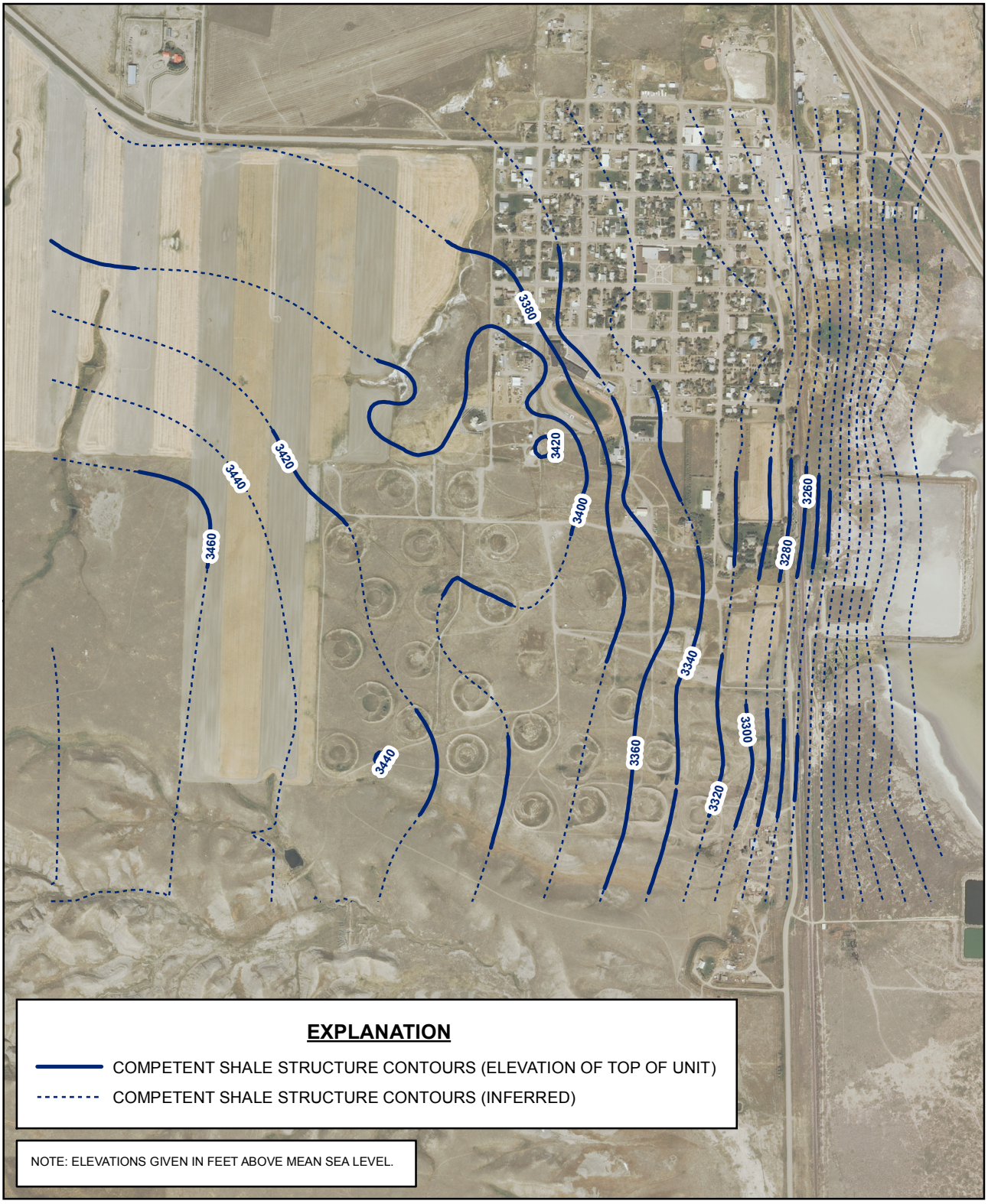
FIGURE 4.5-5

WEATHERED SHALE ISOPACH MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 1200'	Date: 9/18/12	File: 201206_WS_ISOPACH.mxd



2011 NAIP AERIAL IMAGE

N

0 1,200'

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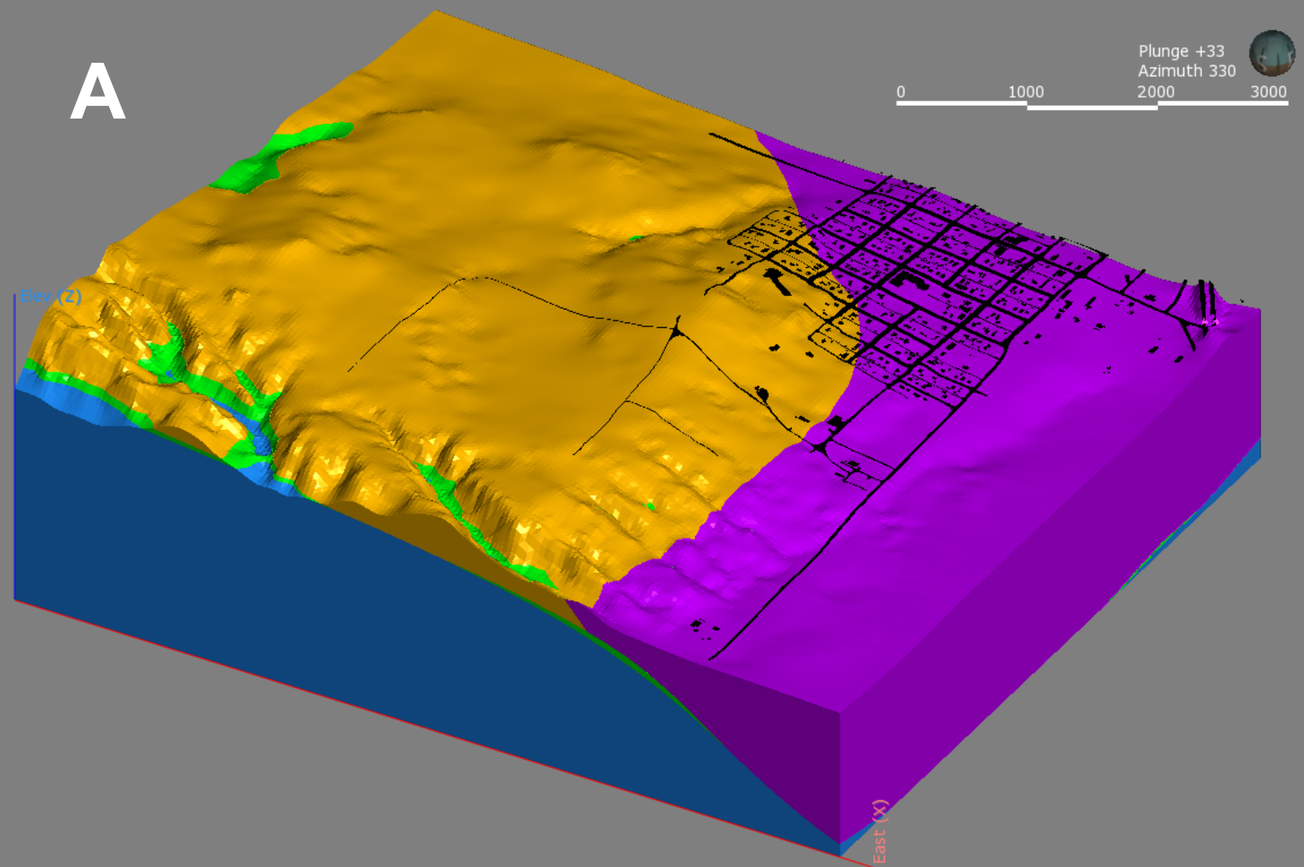
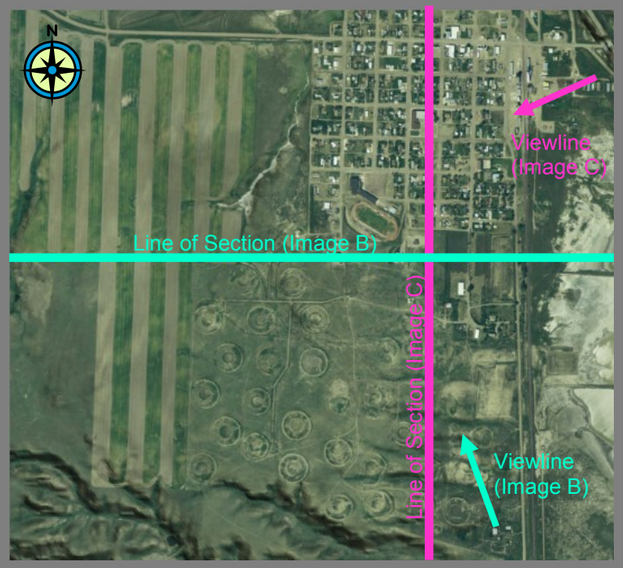
FIGURE 4.5-6

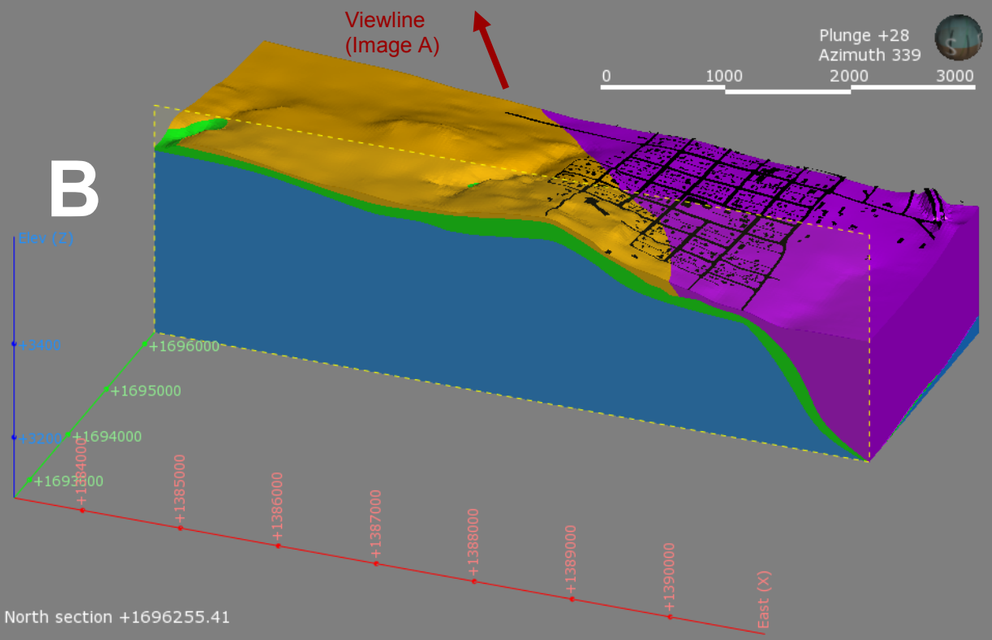
COMPETENT SHALE STRUCTURE CONTOUR MAP

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 1200'	Date: 9/18/12	File: 201206_C~hale_Structure.mxd







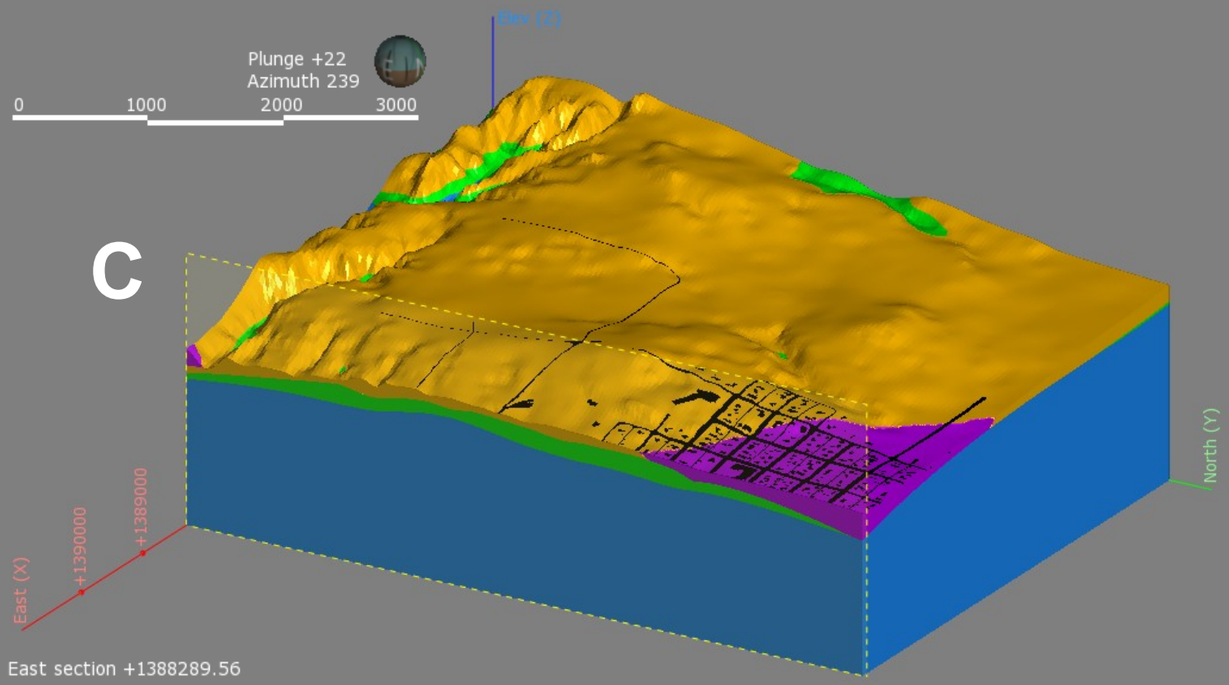


FIGURE 4.5-7. THREE DIMENSIONAL GEOLOGIC MODEL
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 8/23/2012

EXPLANATION

Roads and Structures

Geologic Units

- Overburden—Glacial Drift
- Overburden—Alluvial Sediments
- Weathered Shale
- Competent Shale

6 times vertical exaggeration

EXPLANATION

- PUMP TEST LOCATION - GW-ES
- PUMP TEST LOCATION - P2RI-45E
- MONITORING WELL
- PUMP TEST AREA
- PROPERTY BOUNDARY 2013

N

0 180'

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FIGURE 4.5-8

LONG TERM PUMP TEST LOCATIONS

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JH	Checked By: TF	Scale: 1" = 180'	Date: 6/5/13	File: 20120809_PumpTest_2013upd.mxd

FIGURE 4.5-9. LOCATION P2RI-45E WELL NETWORK, PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

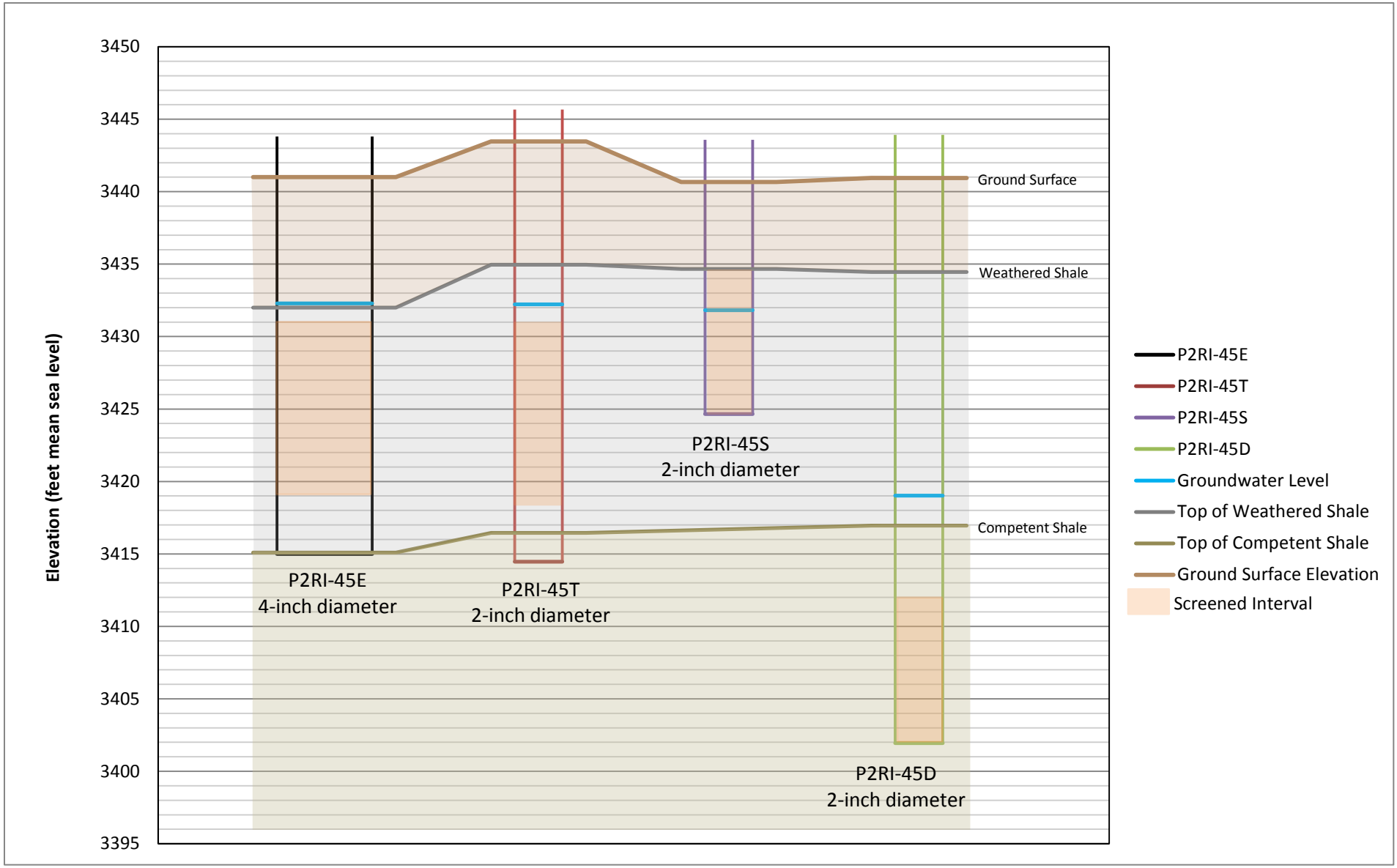


FIGURE 4.5-10. LOCATION P2RI-45E PUMP TEST RESULTS, PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

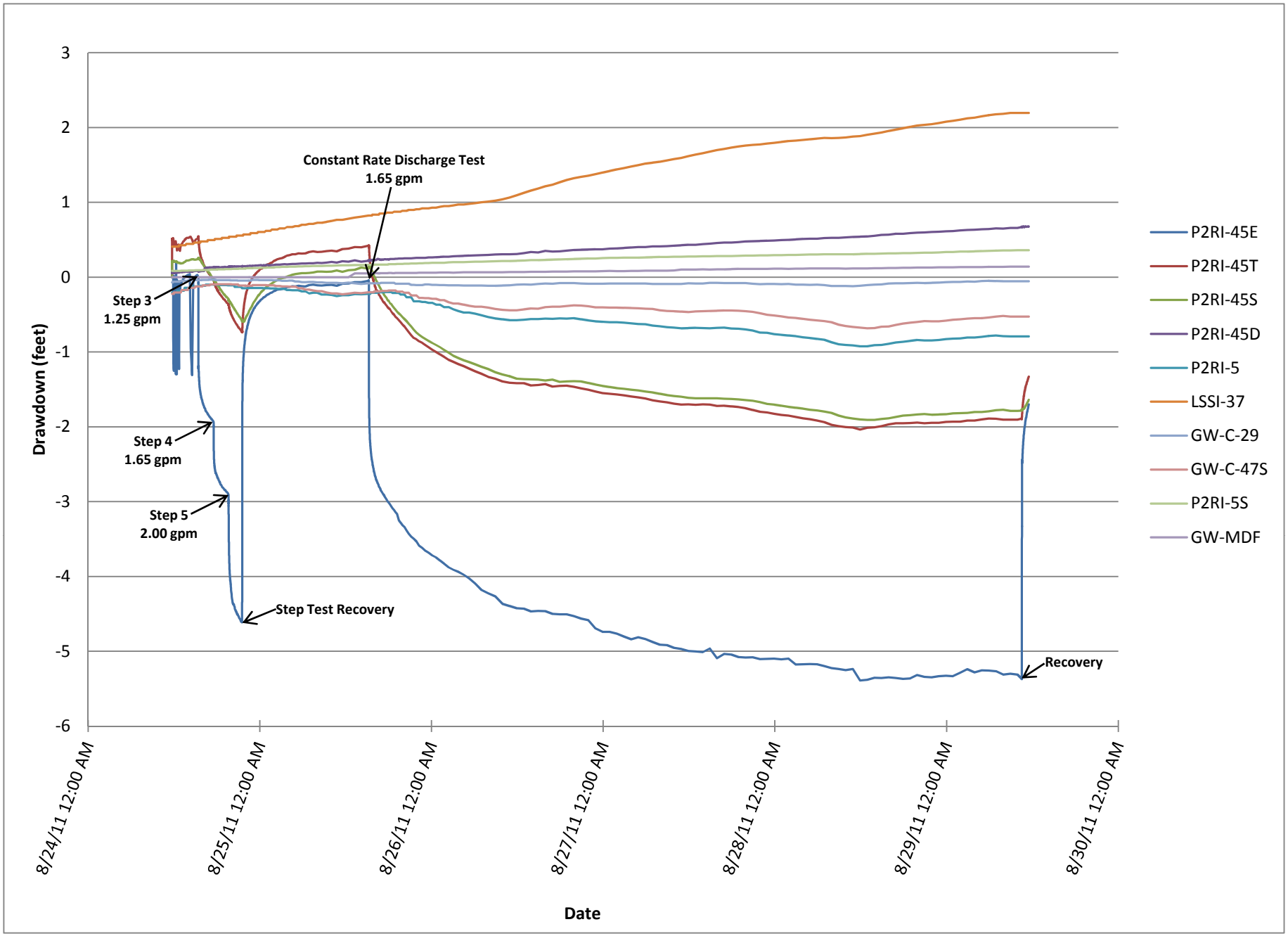


FIGURE 4.5-11. LOCATION GW-ES WELL NETWORK, PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

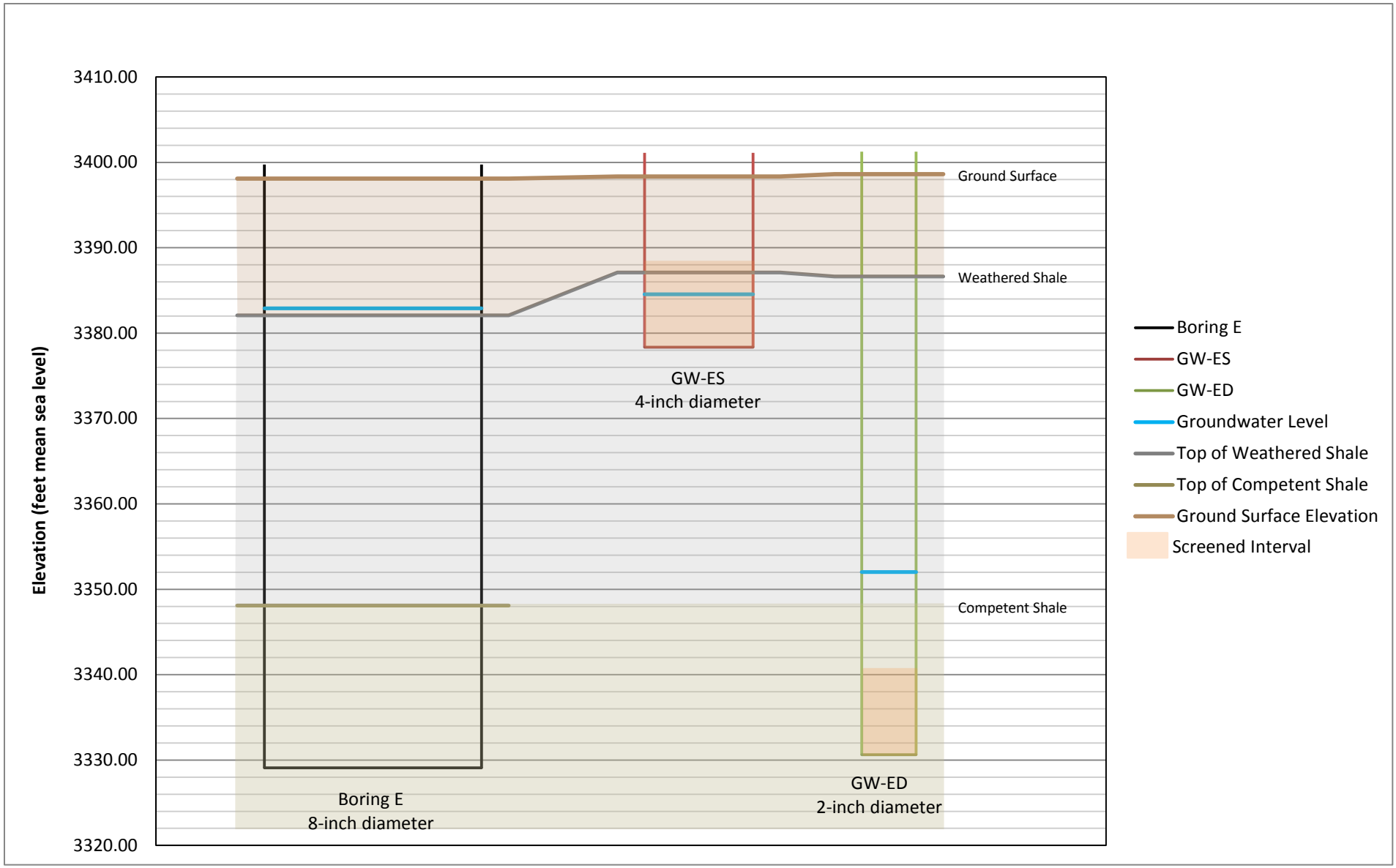
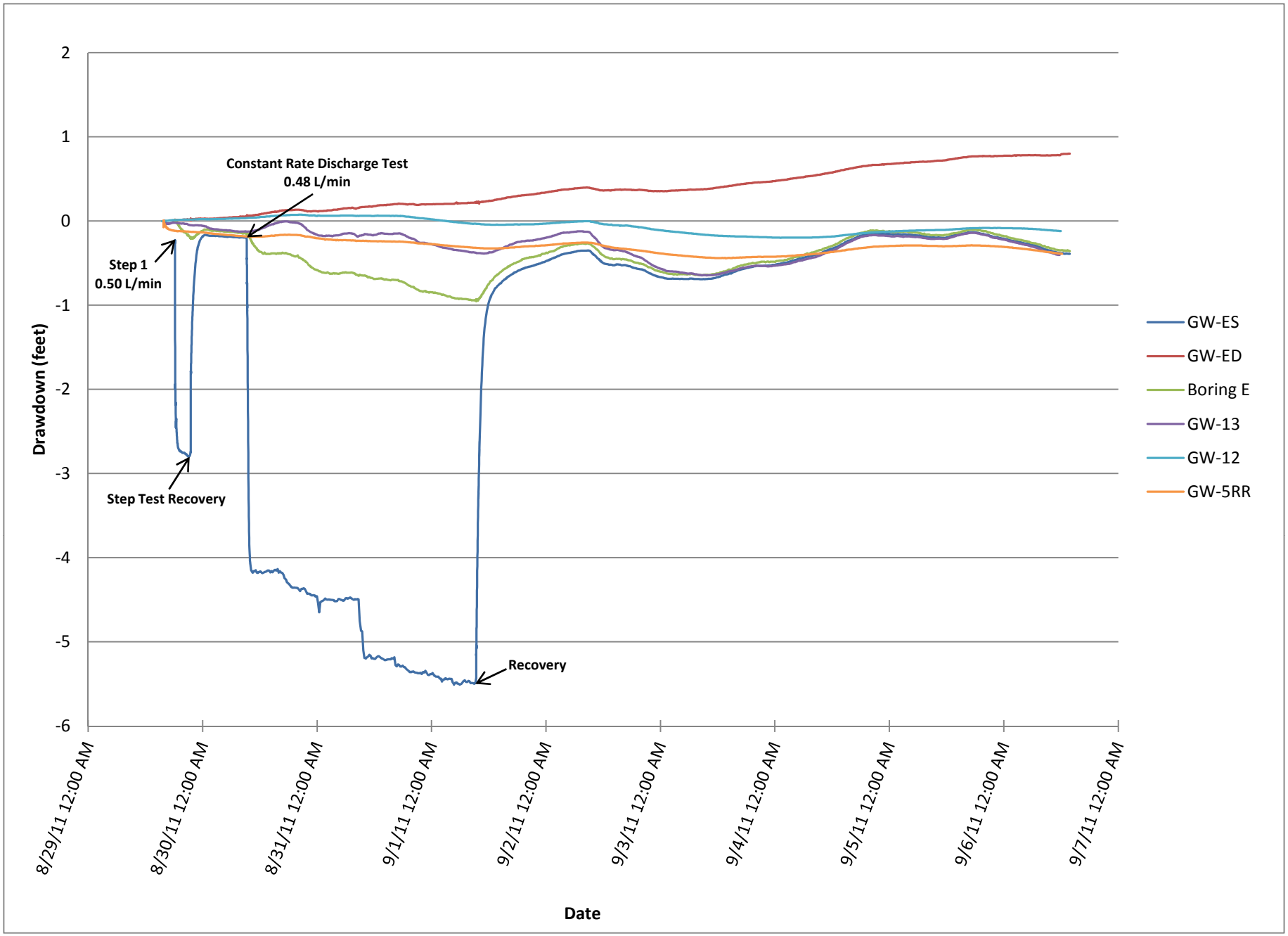
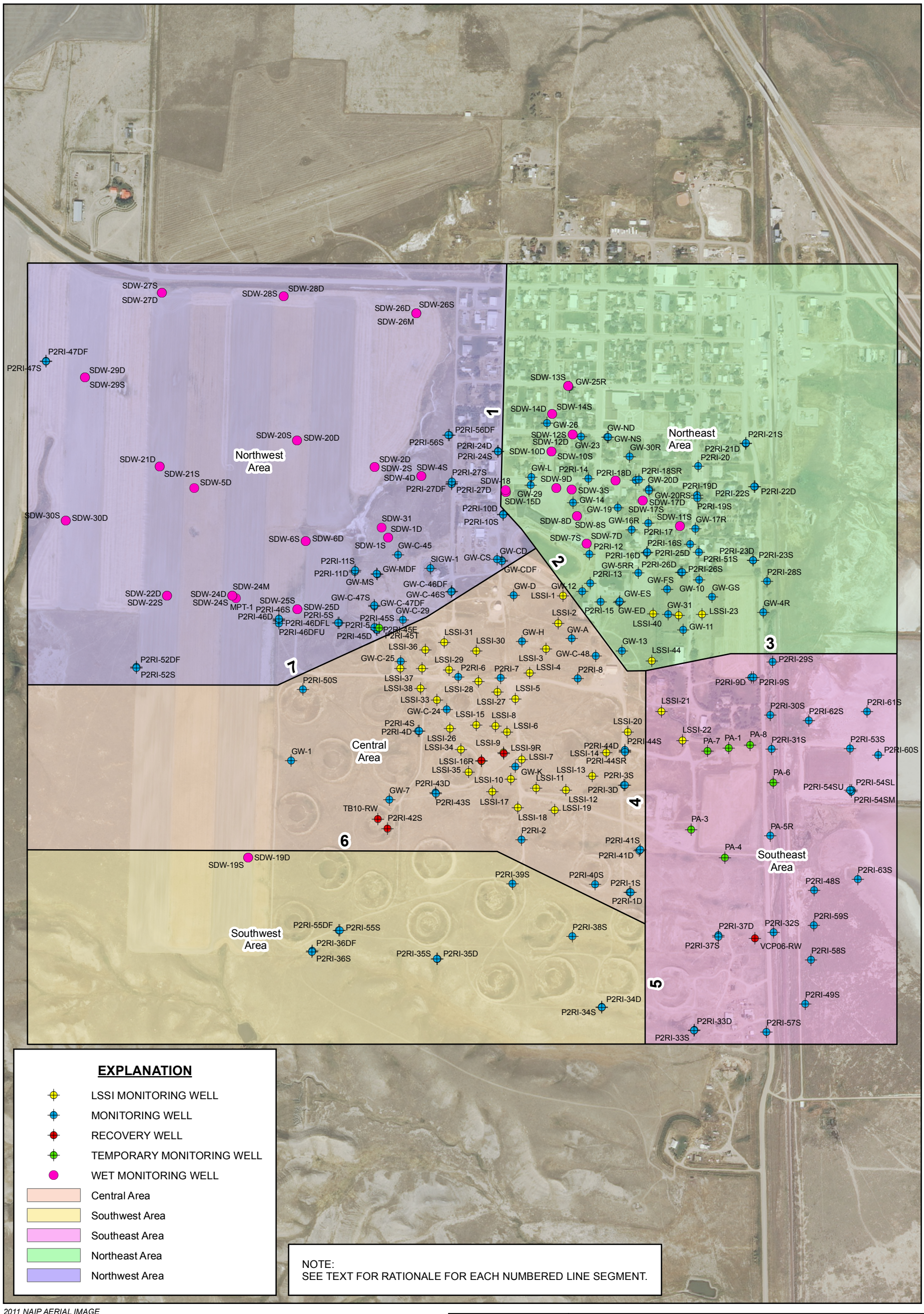


FIGURE 4.5-12. LOCATION GW-ES PUMP TEST RESULTS, PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA





2011 NAIP AERIAL IMAGE

N

0 750'

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FIGURE 4.5-13

GEOGRAPHICAL DIVISIONS OF FACILITY

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JDF	Checked By: TF	Scale: 1 " = 750 '	Date: 9/18/12	File: Fig_P2RI_WellMngmentAreas.mxd

ANALYTE TABLE EXPLANATION

Label		Value	Note
WELL DESIGNATION	P2RI–1S		
	(10/26/2011)		SAMPLE DATE
ARSENIC	AS	0.01	VALUES SHOWN ARE MDEQ GROUNDWATER STANDARDS OR RBSLs
COLBALT	CO	0.0047	
SELENIUM	SE	0.05	
	(03/15/2011)		
ANTIMONY	SB	0.006	
BARIUM	BA	1	
BERYLLIUM	BE	0.004	
CADMIUM	CD	0.005	
	(12/09/2011)		
COPPER	CU	1.3	
LEAD	PB	0.015	
	WELL P&A (09/20/2011)		WELL PLUGGED AND ABANDONED (DATE)
	ALL	ND/BELOW RBSL	
	(03/21/2012)		
MERCURY	HG (DISSOLVED)	0.002	VALUES SHOWN ARE MDEQ GROUNDWATER STANDARDS OR RBSLs
CHROMIUM	CR (DISSOLVED)	0.1	
NICKEL	NI (DISSOLVED)	0.1	
VANADIUM	V (DISSOLVED)	0.078	
ZINC	ZN (DISSOLVED)	2	
	METALS NOT SAMPLED		NOT ENOUGH WATER TO SAMPLE METALS

NOTES:

1. ALL VALUES IN MILLIGRAMS PER LITER (mg/L).
2. VALUES IN **BOLD** FONT AND **BLACK** COLOR EXCEED MDEQ GROUNDWATER STANDARDS OR RISK BASED SCREENING LEVELS (RBSLs).
3. ALL RESULTS ARE FOR TOTAL INORGANICS UNLESS THERE IS A "(DISSOLVED)" INDICATOR AFTER THE CONSTITUENT. SEE ANALYTE TABLE EXPLANATION.
4. DETECTED CONSTITUENTS WITH CONCENTRATIONS EITHER BELOW MDEQ GROUNDWATER STANDARDS/RBSLs OR WITHOUT RBSLs ARE NOT SHOWN/DESCRIBED, COMPLETE DATA IN TABLES 4.6-1 AND 4-I-1-A.
5. INORGANIC CONSTITUENTS NOT SHOWN/DESCRIBED ON FIGURE, COMPLETE DATA IN TABLES 4.6-1 AND 4-I-1-A.

N

0 200' 400'

EXPLANATION

- P2RI–1S — MONITORING WELL AND DESIGNATION
- LSSI–16 — MONITORING WELL AND DESIGNATION NOT SAMPLED DUE TO INTERMITTENT PRESENCE OF LNAPL
- P2RI–25S — MONITORING WELL AND DESIGNATION - PLUGGED AND ABANDONED
- 15 — INTERSTATE HIGHWAY
- PROPERTY BOUNDARY
- JB — ESTIMATED CONCENTRATION DUE TO BLANK CONCENTRATION
- ND() — NOT DETECTED (METHOD DETECTION LIMIT, mg/L)
- P2RI — PHASE II REMEDIAL INVESTIGATION
- RBSL — RISK BASED SCREENING LEVEL

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FIGURE 4.6-1

INORGANIC CONSTITUENTS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: KBW	Checked By: PH	Scale: 1" = 200'	Date: 7/23/13	File: 136INORGANICREV2012

ANALYTE TABLE EXPLANATION

Label	P2RI-4S	
WELL DESIGNATION	P2RI-4S	
SAMPLE DATE	(10/26/2011)	
BENZENE	B	0.005
1,3-BUTADIENE	1,3-BD	0.000016
TOLUENE	T	1
n-HEXANE	H	0.25
1,2,4-TRIMETHYLBENZENE	1,2,4-TMB	0.015
	(03/15/2011)	
1,2-DICHLOROETHANE	1,2-DCA	0.004
BENZO(a) PYRENE	BAP	0.00005
NAPHTHALENE	N	0.1
BENZO (a) ANTHRACENE	BAA	0.0005
	(12/09/2011)	
INDENO (1,2,3-CD) PYRENE	IDP	0.0005
BIS (2-ETHYLHEXYL) PHTHALATE	BEHP	0.006
WELL PLUGGED AND ABANDONED (DATE)	WELL P&A (09/2010)	
(*) INDICATES PVC PRIMER SAMPLING	SIX QUARTERS OF SAMPLING*	
	ALL	ND/BELOW RBSL
	(03/21/2012)	
2-BUTANONE	2B	4.3
1,3,5-TRIMETHYLBENZENE	1,3,5-TMB	0.015
1-METHYLNAPHTHALENE	1MN	0.00097
2-METHYLNAPHTHALENE	2MN	0.027
BENZO (b) FLUORANTHENE	BBF	0.0005
DIBEN (a,h) ANTHRACENE	DBA	0.00005
C5-C8 ALIPHATICS	C5-C8	0.7
C9-C10 ALIPHATICS	C9-C10	1
C9-C12 ALIPHATICS	C9-C12	1
TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS	TEPH	1
TOTAL PURGEABLE HYDROCARBONS	TPH	1

VALUES SHOWN ARE MDEQ GROUNDWATER STANDARDS OR RBSLs

NOTES:

1. ALL VALUES IN MILLIGRAMS PER LITER (mg/L).
2. VALUES IN **BOLD** AND **BLACK** COLOR EXCEED MDEQ GROUNDWATER STANDARDS OR RISK BASED SCREENING LEVELS (RBSLs).
3. DETECTED CONSTITUENTS WITH CONCENTRATIONS EITHER BELOW MDEQ GROUNDWATER STANDARDS/RBSLs OR WITHOUT RBSLs ARE NOT SHOWN/DESCRIBED, COMPLETE DATA IN TABLES 4.6-2, 3, 4 AND TABLES 4-I-1-B, C, D.
4. ORGANIC CONSTITUENTS NOT SHOWN/DESCRIBED ON FIGURE, COMPLETE DATA IN TABLES 4.6-2, 3, 4 AND TABLES 4-I-1-B, C, D.

N

0 200' 400'

EXPLANATION

- P2RI-1S — MONITORING WELL AND DESIGNATION
- P2RI-18 — MONITORING WELL AND DESIGNATION - PLUGGED AND ABANDONED
- LSSI-16 — MONITORING WELL AND DESIGNATION NOT SAMPLED DUE TO INTERMITTENT PRESENCE OF LNAPL
- 15 — INTERSTATE HIGHWAY
- PROPERTY BOUNDARY
- J — ESTIMATED CONCENTRATION
- ND() — NOT DETECTED (METHOD DETECTION LIMIT, mg/L)
- P2RI — PHASE II REMEDIAL INVESTIGATION
- RBSL — RISK BASED SCREENING LEVEL

FIGURE 4.6-2

ORGANIC CONSTITUENTS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

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Drawn By: KBW	Checked By: PH	Scale: 1" = 200'	Date: 7/23/13	File: 136ORGANICREV2012

2011 NAIP AERIAL IMAGE

N

0 600'

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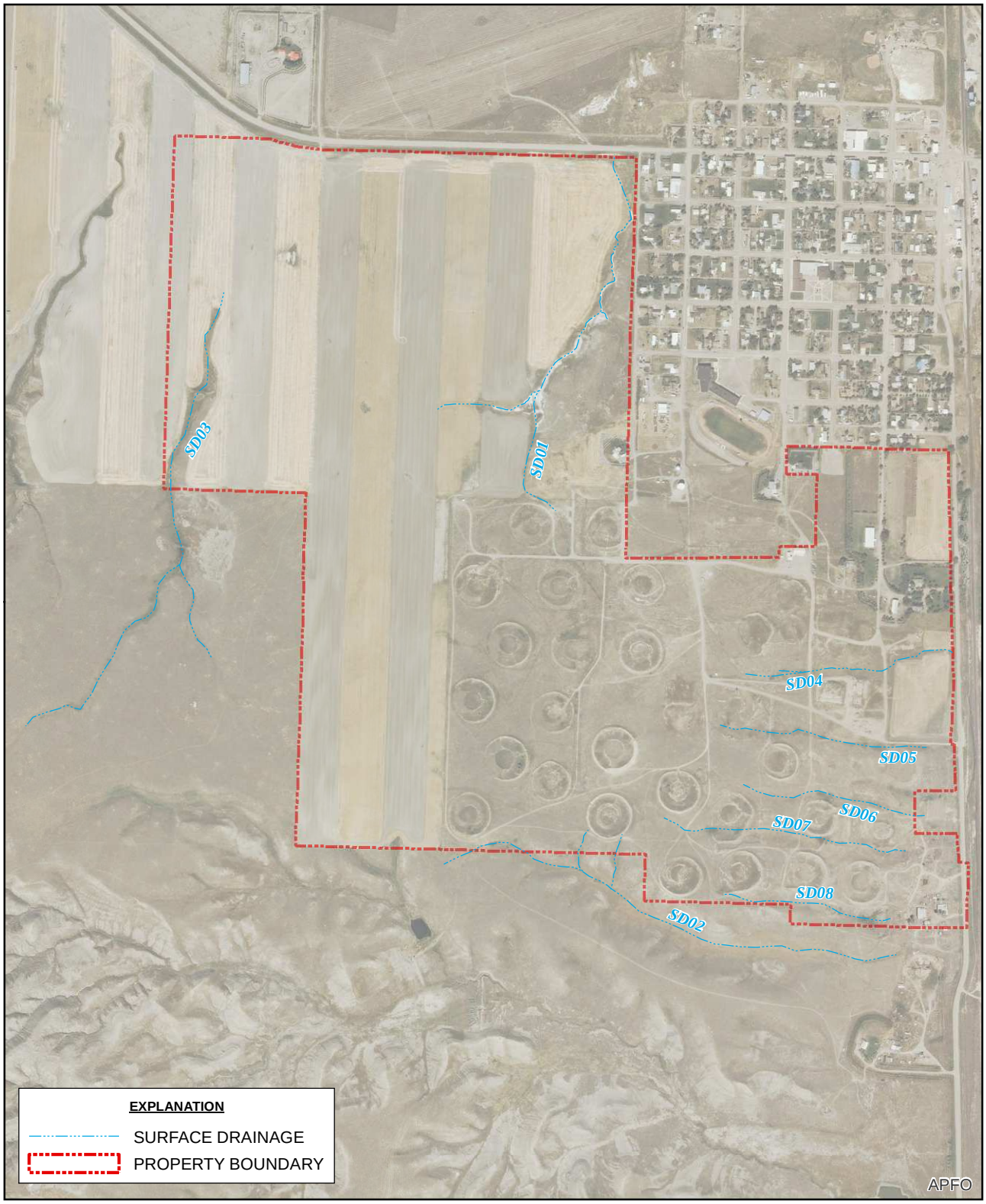
FIGURE 4.10-1

HYDROCARBON FORENSICS SAMPLE LOCATIONS

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1" = 600'	Date: 9/18/2012	File: Fig_P2RI_Forensic_Dates.mxd



N

0 1,100'

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FIGURE 5.1-1

SURFACE DRAINAGE LOCATIONS

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: JK	Checked By: PH	Scale: 1" = 1100'	Date: 05/28/13	File: Sunburst_SD_Locations_FIG5.1-1.mxd

NOTES:
1. COI LIST PROVIDED IN TABLE 2.1-2.
2. APPLICABLE SURFACE WATER AND GROUNDWATER SCREENING LEVELS INCLUDED IN TABLE 2.1-2 AND DISCUSSED IN SECTION 5.1.5 OF THE REPORT.
3. COMPLETE ANALYTICAL RESULTS PROVIDED IN APPENDIX 5-C.
4. FOR SURFACE WATER SAMPLES, RESULTS WERE COMPARED TO SURFACE WATER STANDARDS IN DEQ CIRCULAR-7.
5. FOR GROUNDWATER SAMPLES COLLECTED FROM PIEZOMETERS INSTALLED IN SURFACE DRAINAGE 01, RESULTS WERE COMPARED TO GROUNDWATER STANDARDS IN DEQ CIRCULAR-7.

EXPLANATION

- GROUNDWATER: ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- GROUNDWATER: ONE OR MORE COI LIST VOC/VPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- GROUNDWATER: ONE OR MORE COI LIST SVOC/EPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- GROUNDWATER: ALL COI LIST ANALYTE CONCENTRATIONS MET THE APPLICABLE SCREENING LEVELS
- PIEZOMETER LOCATION (NO GROUNDWATER PRESENT)
- SURFACE WATER: ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- SURFACE WATER: ONE OR MORE COI LIST SVOC/EPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- SURFACE WATER: ONE OR MORE COI LIST VOC/VPH CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)
- SURFACE WATER: ALL COI LIST ANALYTE CONCENTRATIONS MET THE APPLICABLE SCREENING LEVELS
- SURFACE DRAINAGE
- PROPERTY BOUNDARY

N

0 700'

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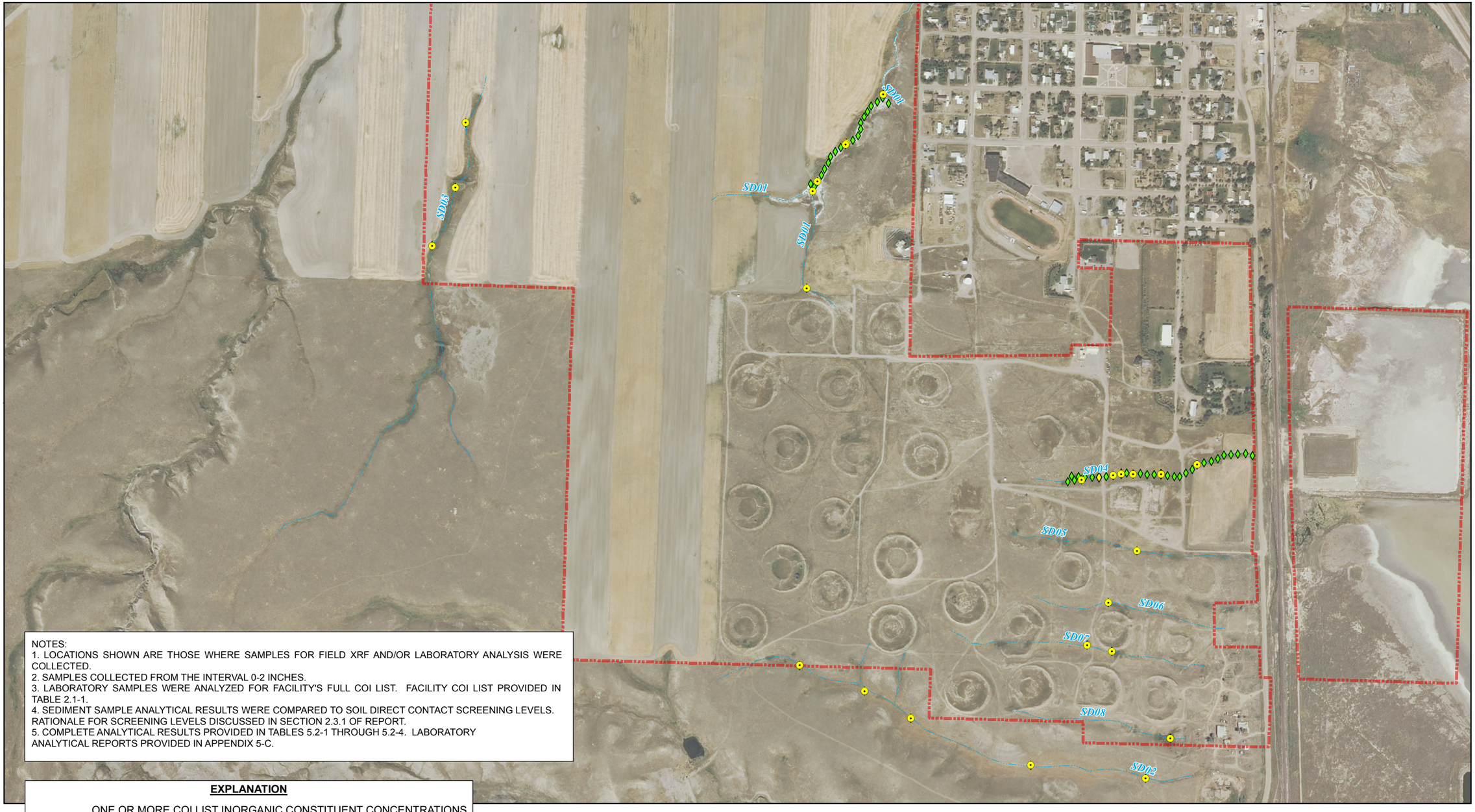
FIGURE 5.1-2
SURFACE DRAINAGES
SURFACE WATER AND GROUNDWATER
SAMPLE LOCATIONS AND RESULTS

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JK	Checked By: PH	Scale: 1" = 700'	Date: 11/5/13	File: Sunburst_PhaseII_SD_SW_FIG5.1-2.mxd



NOTES:
1. LOCATIONS SHOWN ARE THOSE WHERE SAMPLES FOR FIELD XRF AND/OR LABORATORY ANALYSIS WERE COLLECTED.
2. SAMPLES COLLECTED FROM THE INTERVAL 0-2 INCHES.
3. LABORATORY SAMPLES WERE ANALYZED FOR FACILITY'S FULL COI LIST. FACILITY COI LIST PROVIDED IN TABLE 2.1-1.
4. SEDIMENT SAMPLE ANALYTICAL RESULTS WERE COMPARED TO SOIL DIRECT CONTACT SCREENING LEVELS. RATIONALE FOR SCREENING LEVELS DISCUSSED IN SECTION 2.3.1 OF REPORT.
5. COMPLETE ANALYTICAL RESULTS PROVIDED IN TABLES 5.2-1 THROUGH 5.2-4. LABORATORY ANALYTICAL REPORTS PROVIDED IN APPENDIX 5-C.

EXPLANATION

- ONE OR MORE COI LIST INORGANIC CONSTITUENT CONCENTRATIONS EXCEEDED THE APPLICABLE SCREENING LEVEL(S)

XRF DATA

- XRF LEAD < 400 PPM
- XRF LEAD ≥ 400 PPM
- SURFACE DRAINAGE
- PROPERTY BOUNDARY

N

0 700'

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FIGURE 5.2-1

SURFACE DRAINAGES SEDIMENT SAMPLE LOCATIONS AND RESULTS

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Drawn By: JK	Checked By: PH	Scale: 1" = 700'	Date: 11/5/13	File: Sunburst_PhaseII_SD_SED_FIG5.2-1.mxd

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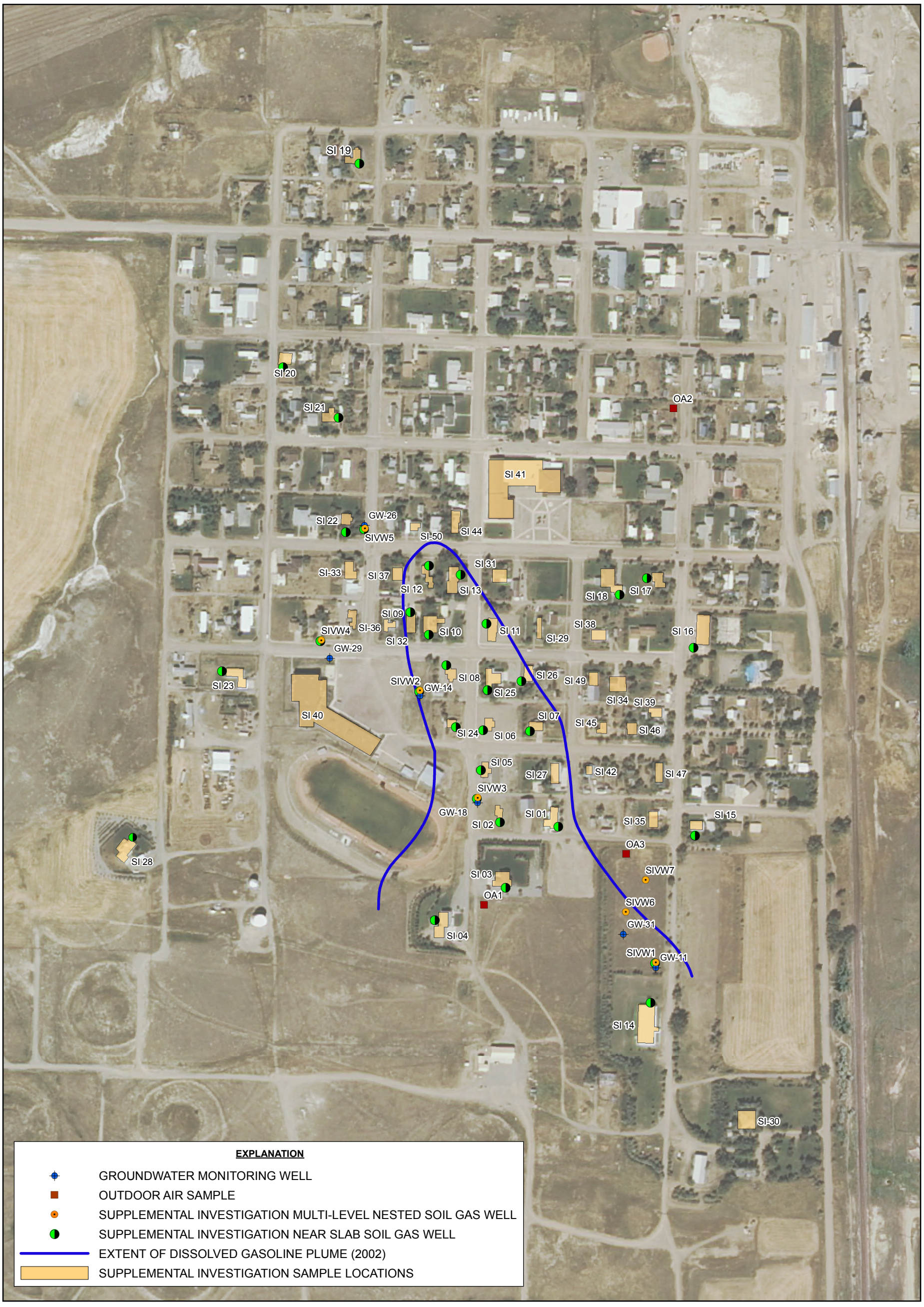
FIGURE 5.3-1

SOUTHEAST DIVERSION DITCH

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JK	Checked By: PH	Scale: 1" = 300'	Date: 06/18/13	File: Sunburst_SE_Ditch_Figure5.3-1.mxd



NOTE: LOCATIONS ARE APPROXIMATE.

N

0 350'

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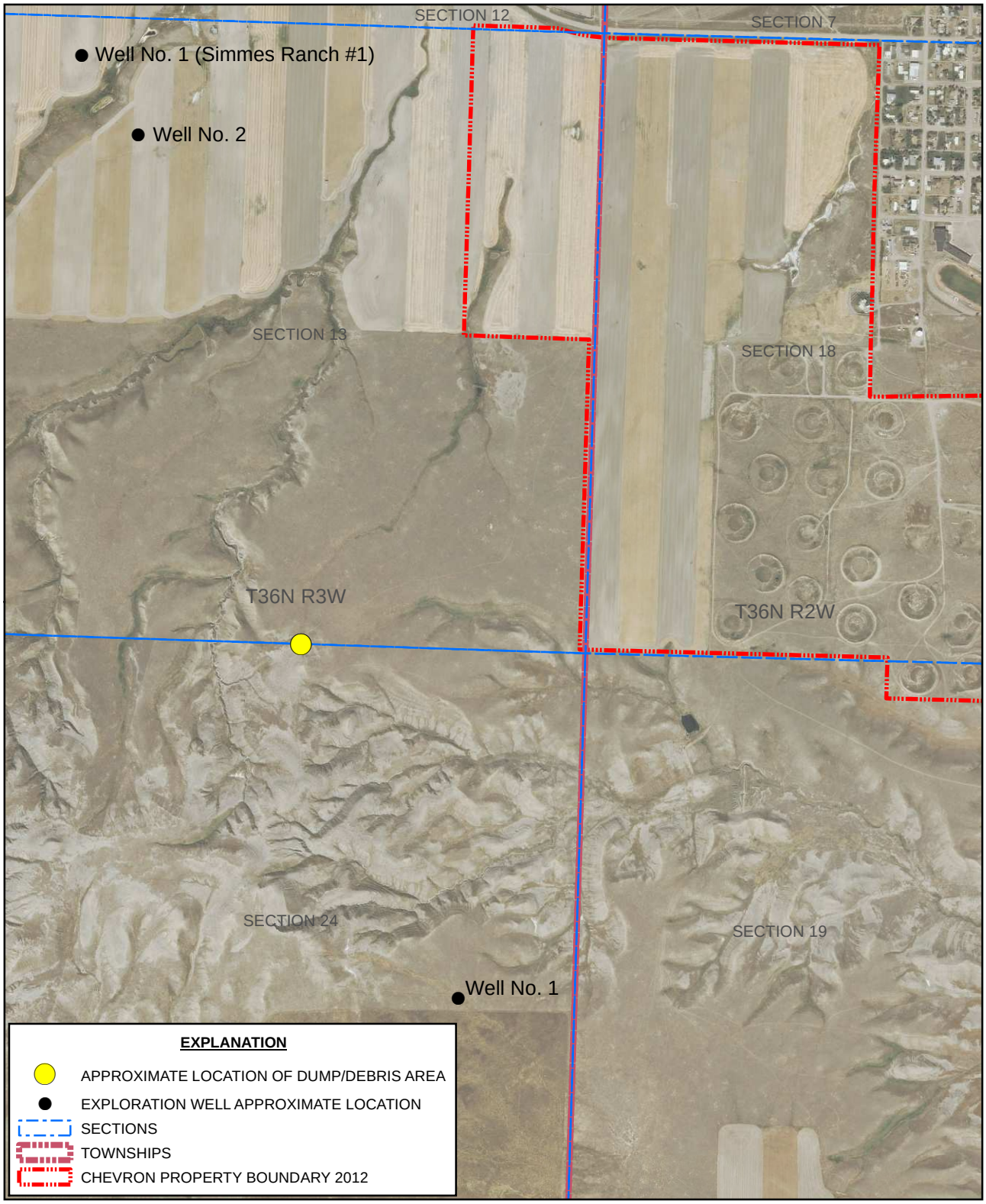
FIGURE 6.2-1

VAPOR INTRUSION INVESTIGATION SAMPLE LOCATIONS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: BZ	Checked By: ST	Scale: 1" = 350'	Date: 06/18/13	File: Sunburst_PhaseII_Vapor.mxd



N

0 1,250 '

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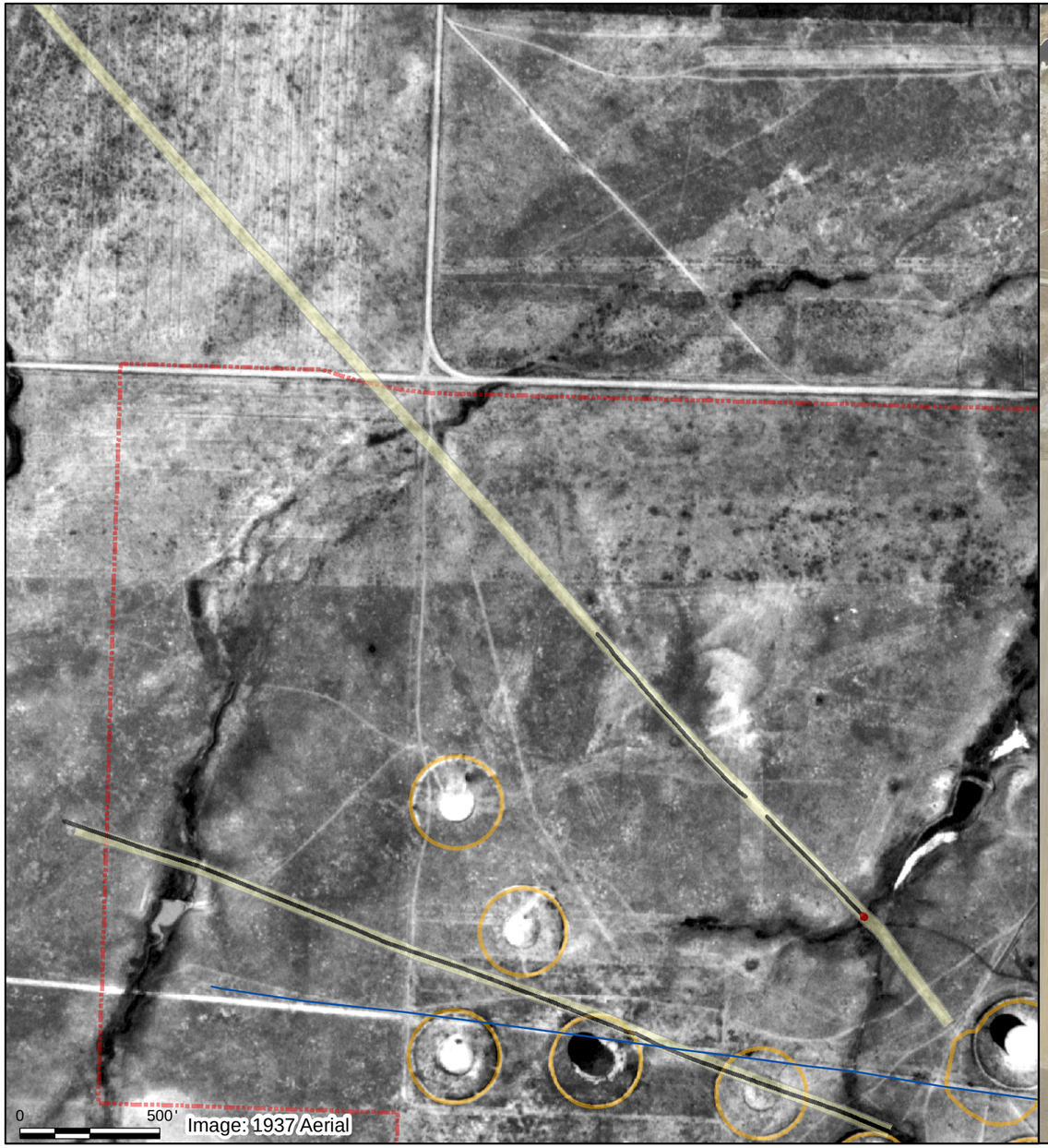
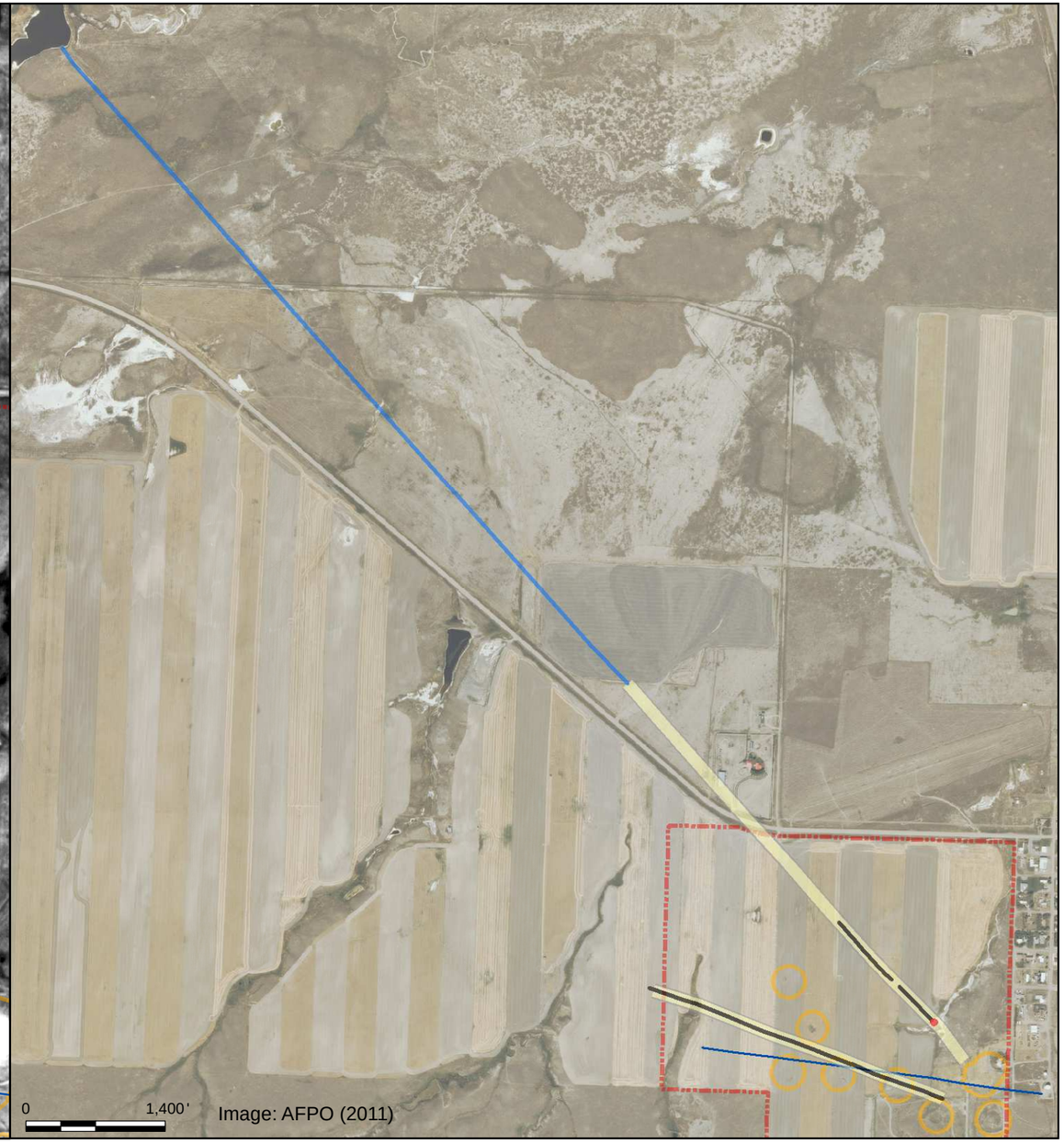
FIGURE 6.3-1

SUSPECTED DUMP AREA AND NEARBY OIL/GAS EXPLORATION WELLS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: JH	Checked By: AC	Scale: 1" = 1250'	Date: 6/18/13	File: Sunburst_PhaseII_FIG6.3-1_2013upd.mxd





EXPLANATION

- PIPELINE: 2011 AERIAL REVIEW
- PIPELINE: EXPOSED
- PIPELINE: TRACED
- PIPELINE: HISTORICAL AERIAL REVIEW
- WATERLINE
- PROPERTY BOUNDARY
- TANK BERMS

N

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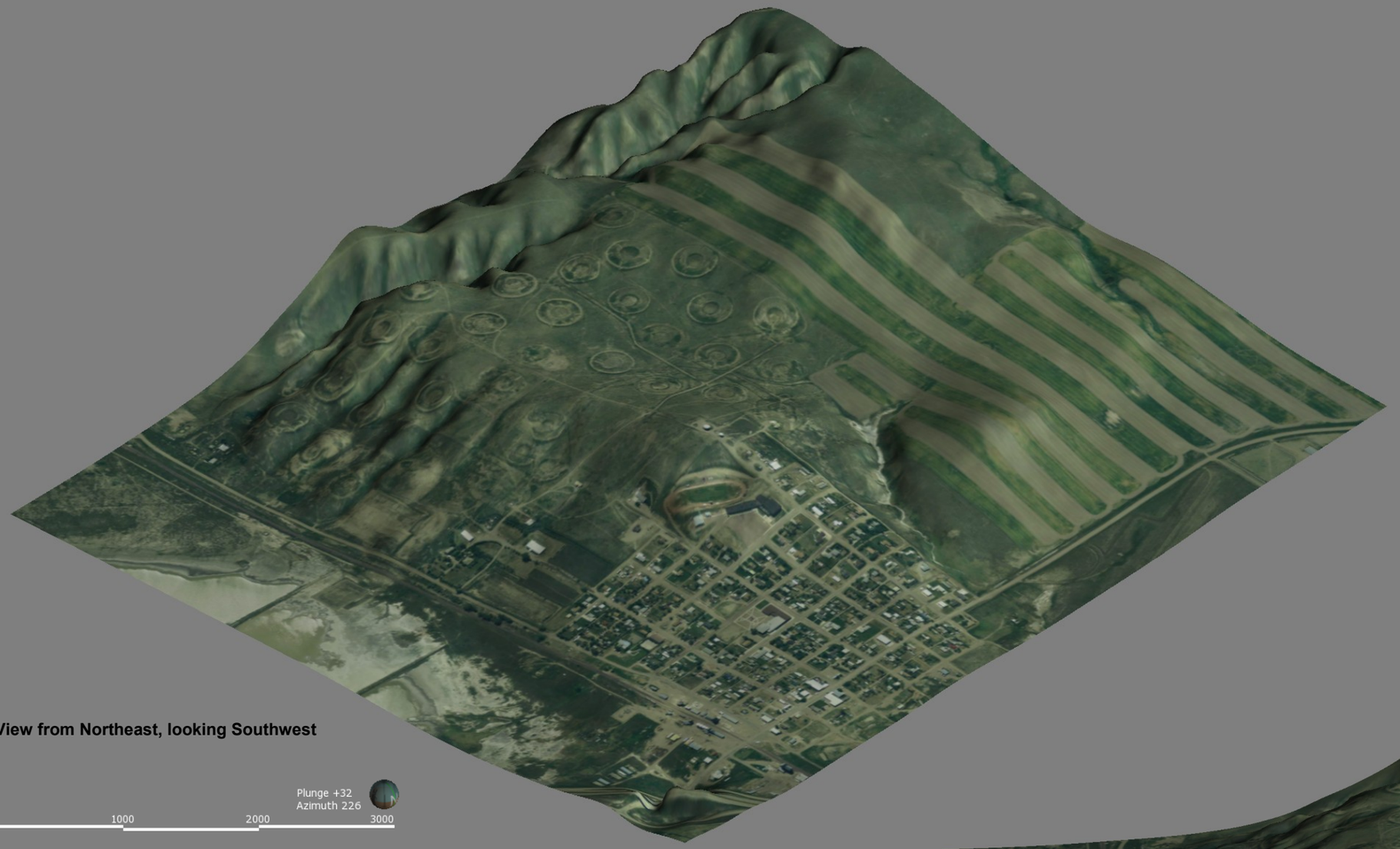
FIGURE 6.4-1

DARLING GATHERING SYSTEM AND UNKNOWN PIPELINE

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: JK	Checked By: PH	Scale: 1" = 1400'	Date: 10/15/13	File: Sunburst_PhaseII_FIG6.4-1_split.mxd



View from Northeast, looking Southwest

Plunge +32
Azimuth 226

0 1000 2000 3000

View from North, looking South

Plunge +18
Azimuth 180

0 500 1000 1500 2000

FIGURE 7.1-1. DIGITAL ELEVATION MODEL
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 9/62012

EXPLANATION

Oblique views of three dimensional topographic surface created from 2011 National Elevation Dataset raster layer.

2005 Aerial image overlay.

6 times vertical exaggeration.

2011 NAIP AERIAL IMAGE

N

0 1,200'

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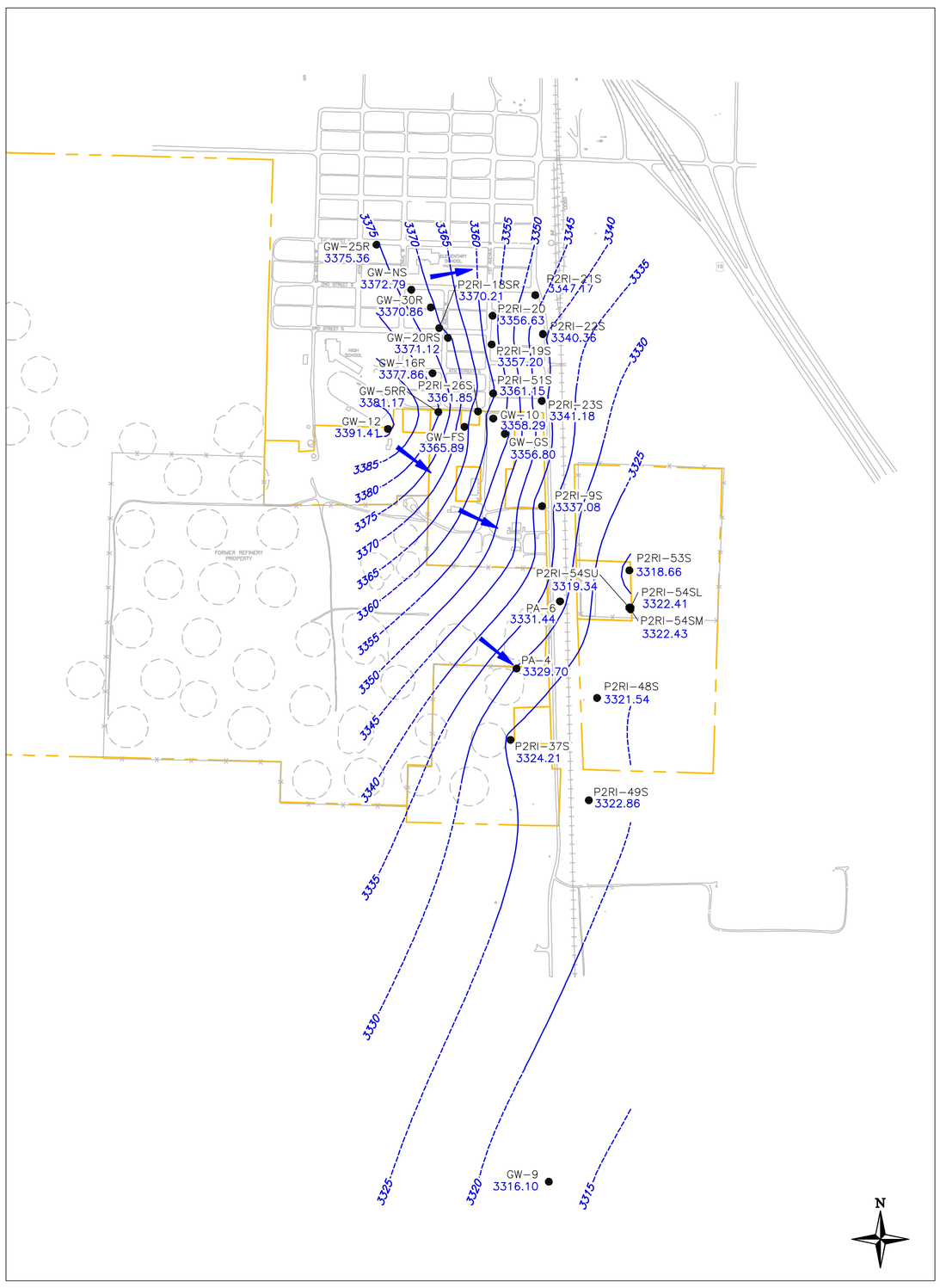
FIGURE 7.1-2

TOPOGRAPHIC CONTOUR MAP

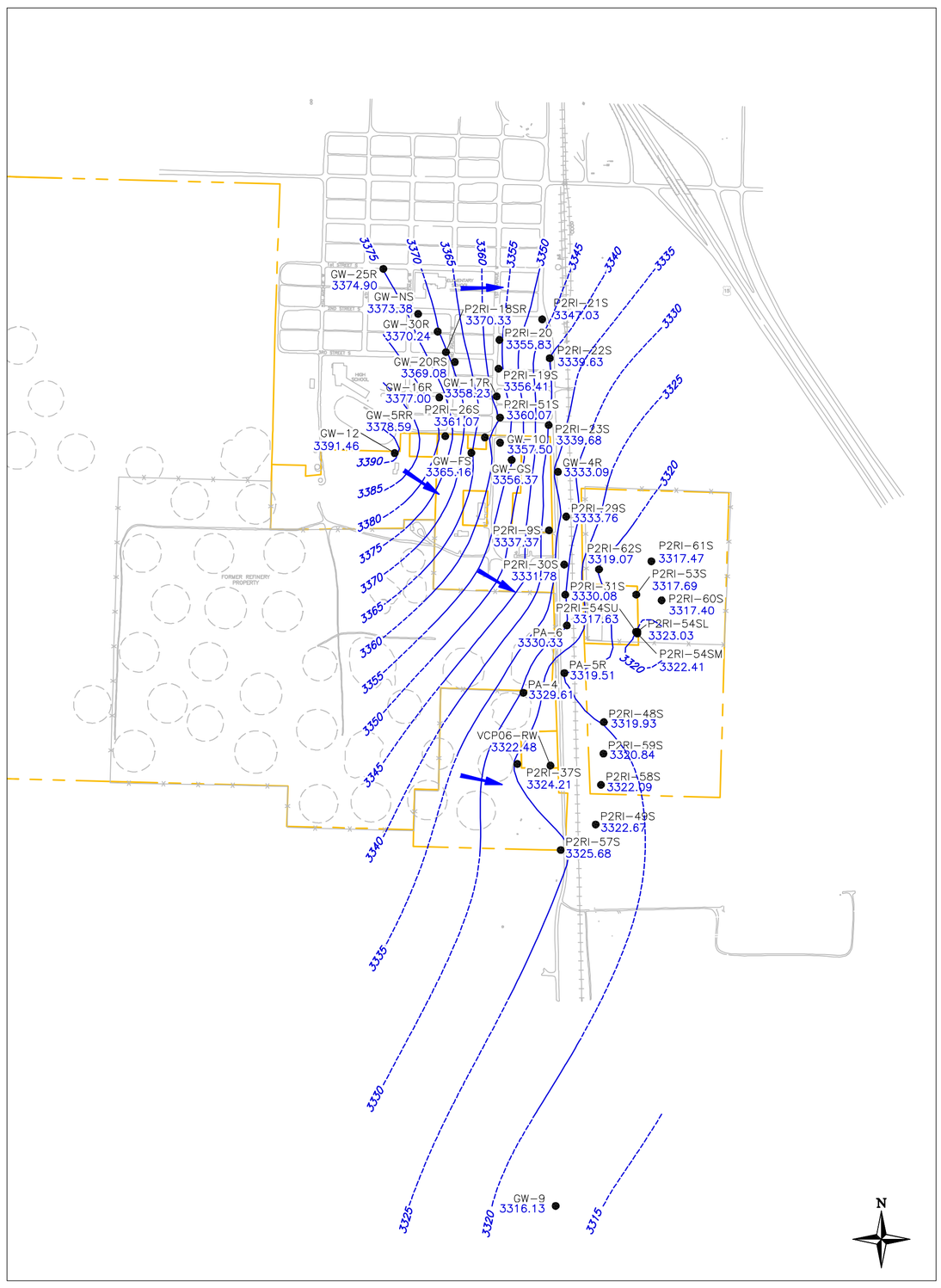
**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 1200'	Date: 12/26/12	File: 201206_TOPO_MAP.mxd



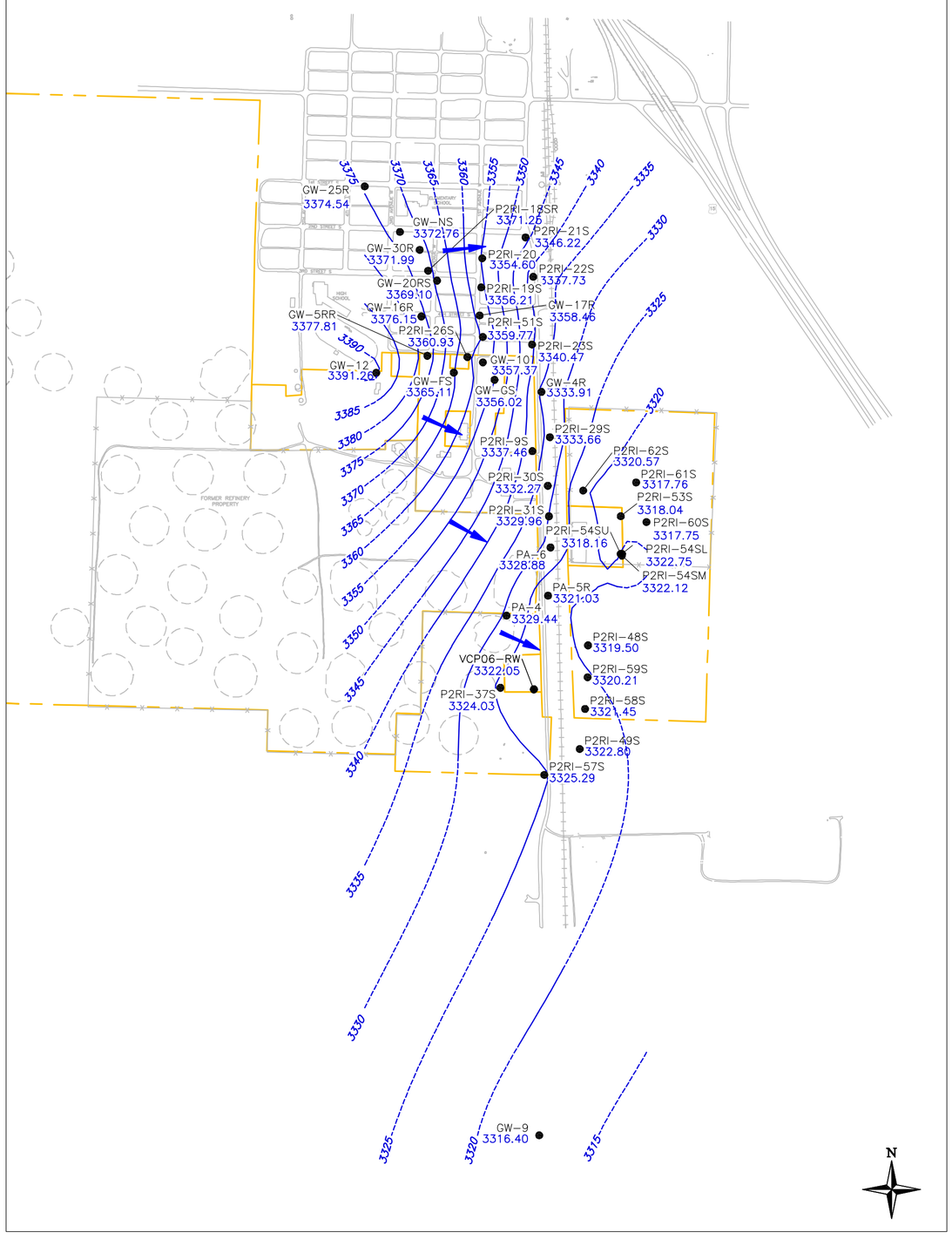
1 **ALLUVIAL SEDIMENTS THIRD QUARTER 2011 (SEPTEMBER)**
SCALE: 1" = 800'

0 800' 1,600'



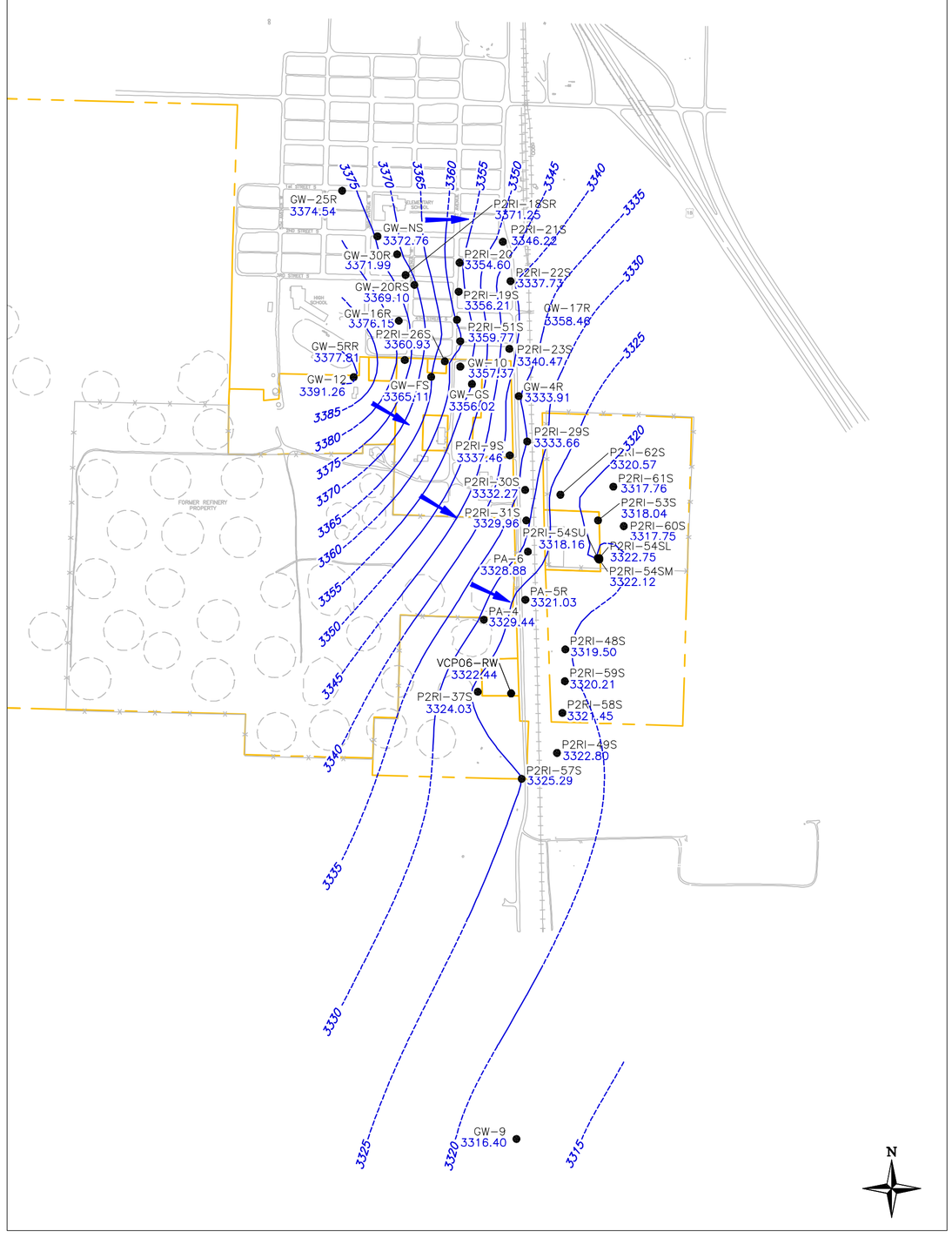
2 **ALLUVIAL SEDIMENTS FOURTH QUARTER 2011 (DECEMBER)**
SCALE: 1" = 800'

0 800' 1,600'



3 **ALLUVIAL SEDIMENTS FIRST QUARTER 2012 (MARCH)**
SCALE: 1" = 800'

0 800' 1,600'



3 **ALLUVIAL SEDIMENTS SECOND QUARTER 2012 (MAY)**
SCALE: 1" = 800'

0 800' 1,600'

EXPLANATION

- P2RI-21S 3346.22 — GROUNDWATER MONITORING WELL AND WATER ELEVATION (FT AMSL)
- FENCE
- RAILROAD
- ROAD
- PROPERTY BOUNDARY
- 3315 — LINE OF EQUAL POTENTIOMETRIC SURFACE ELEVATION, 5 FT AMSL INTERVAL, DASHED WHERE INFERRED
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- BUILDING OR OTHER STRUCTURE
- LOCATION OF FORMER TANK BERM
- P2RI — PHASE II REMEDIAL INVESTIGATION
- FT AMSL — FEET ABOVE MEAN SEA LEVEL

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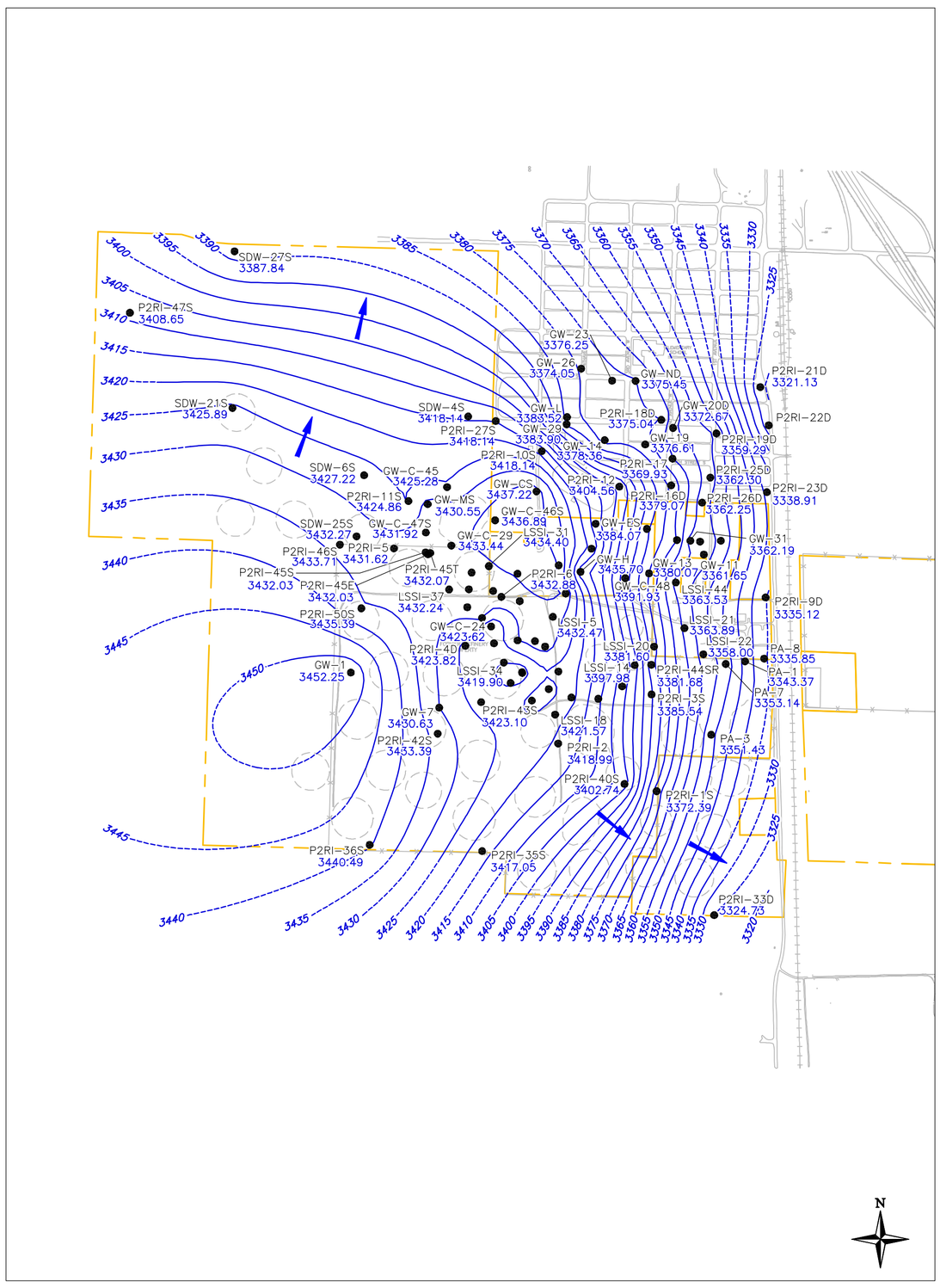
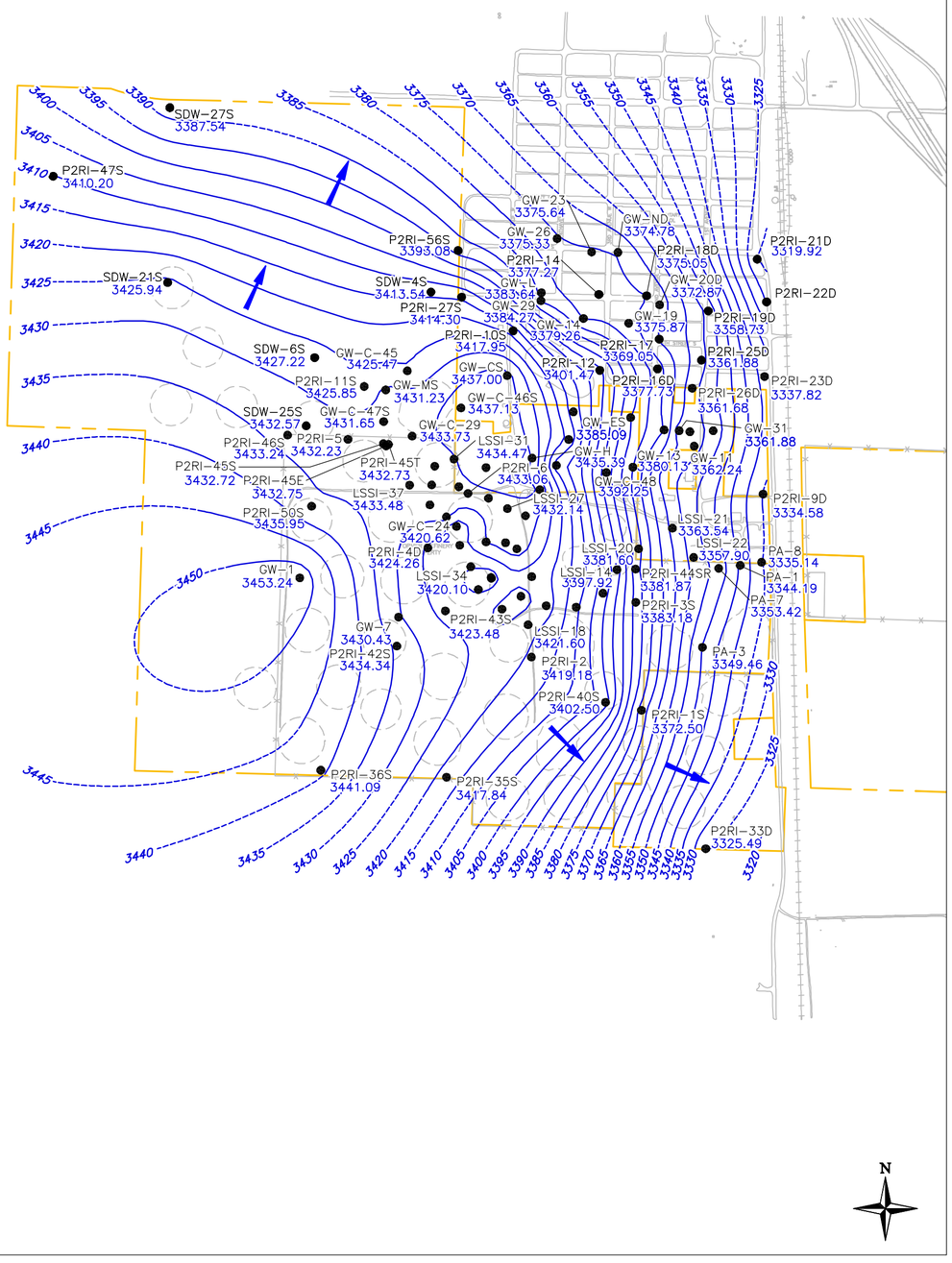
FIGURE 7.1-3
ALLUVIAL SEDIMENTS HYDROSTRATIGRAPHIC UNIT POTENTIOMETRIC SURFACE MAPS (THIRD QUARTER 2011 - SECOND QUARTER 2012)
PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: KBW	Checked By: PH	Scale: 1" = 800'	Date: 9/7/12	File: 136-LSCA-20120630



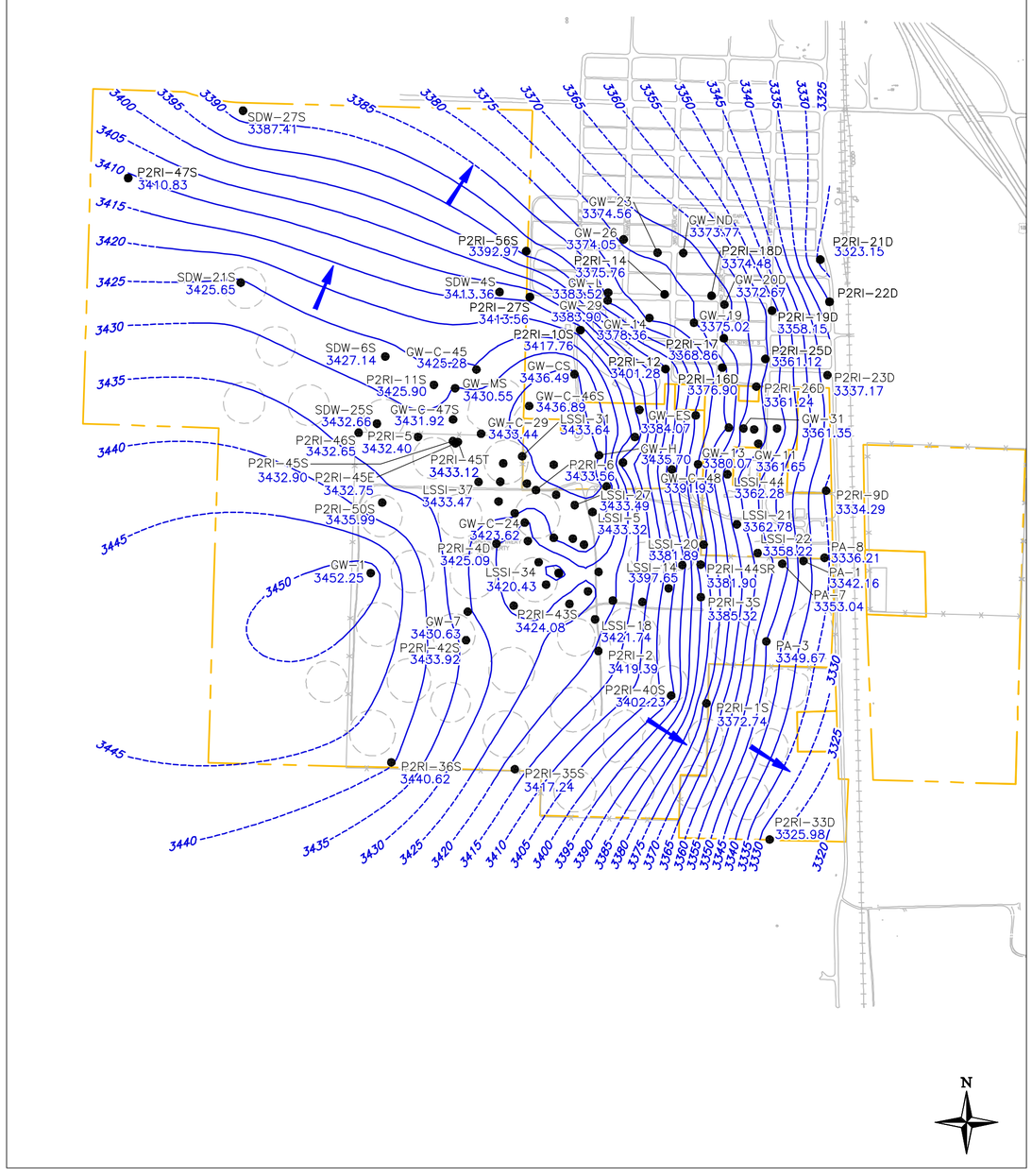
1 WEATHERED SHALE THIRD QUARTER 2011 (SEPTEMBER)
SCALE: 1" = 800'

0 800' 1,600'



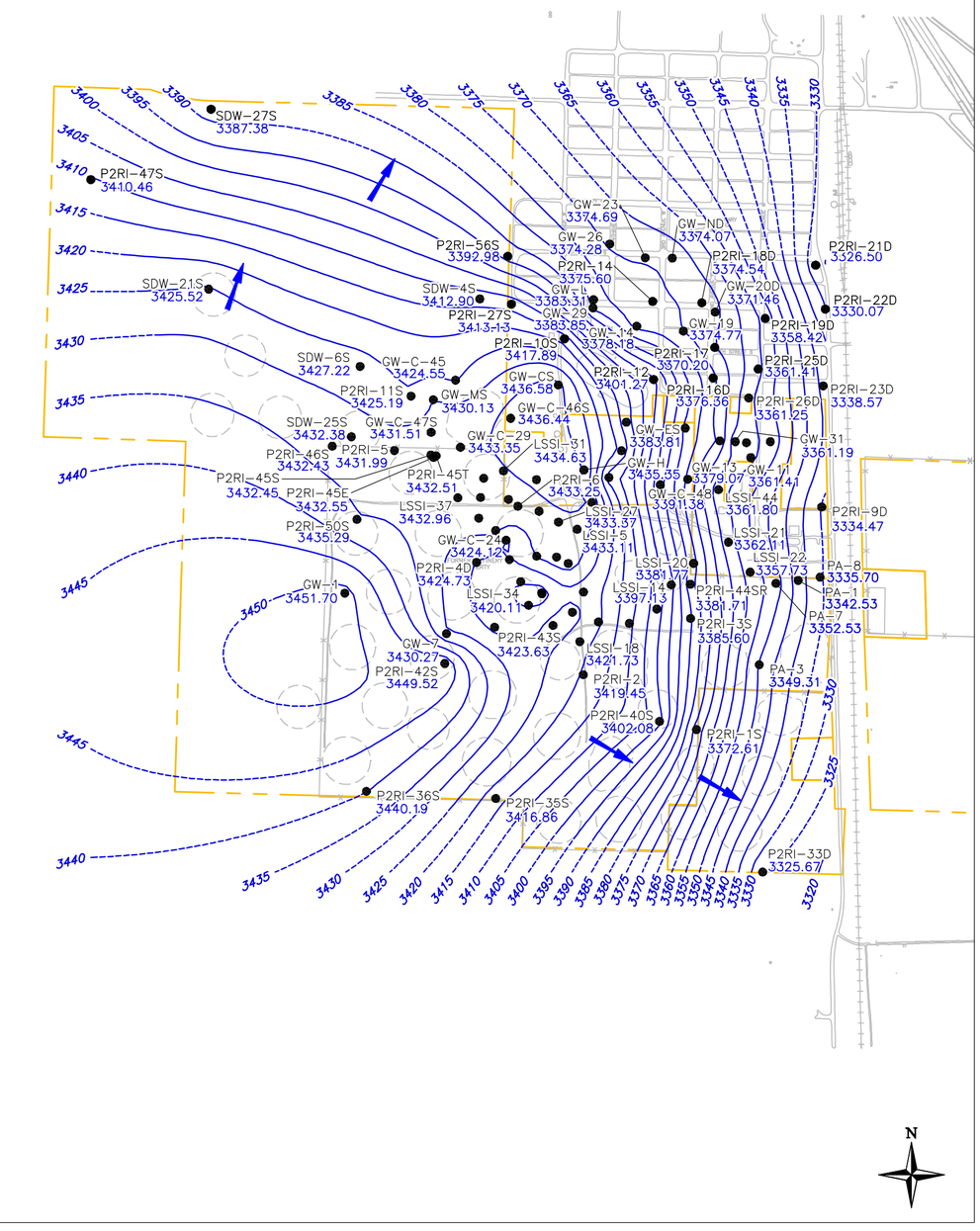
2 WEATHERED SHALE FOURTH QUARTER 2011 (DECEMBER)
SCALE: 1" = 800'

0 800' 1,600'



3 WEATHERED SHALE FIRST QUARTER 2012 (MARCH)
SCALE: 1" = 800'

0 800' 1,600'



4 WEATHERED SHALE SECOND QUARTER 2012 (MAY)
SCALE: 1" = 800'

0 800' 1,600'

EXPLANATION

- P2RI-1S 3372.74 — GROUNDWATER MONITORING WELL AND WATER ELEVATION (FT AMSL)
- FENCE
- RAILROAD
- ROAD
- PROPERTY BOUNDARY
- 3315 — LINE OF EQUAL POTENTIOMETRIC SURFACE ELEVATION, 5 FT AMSL INTERVAL, DASHED WHERE INFERRED
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- BUILDING OR OTHER STRUCTURE
- LOCATION OF FORMER TANK BERM
- P2RI — PHASE II REMEDIAL INVESTIGATION

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FIGURE 7.1-4
WEATHERED SHALE HYDROSTRATIGRAPHIC UNIT POTENTIOMETRIC SURFACE MAPS (THIRD QUARTER 2011 - SECOND QUARTER 2012)
PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: KBW	Checked By: PH	Scale: 1" = 800'	Date: 12/28/12	File: 136-WSA-20120630

FIGURE 7.1-5. THREE DIMENSIONAL WATER-BEARING ZONES MODEL
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 9/6/2012

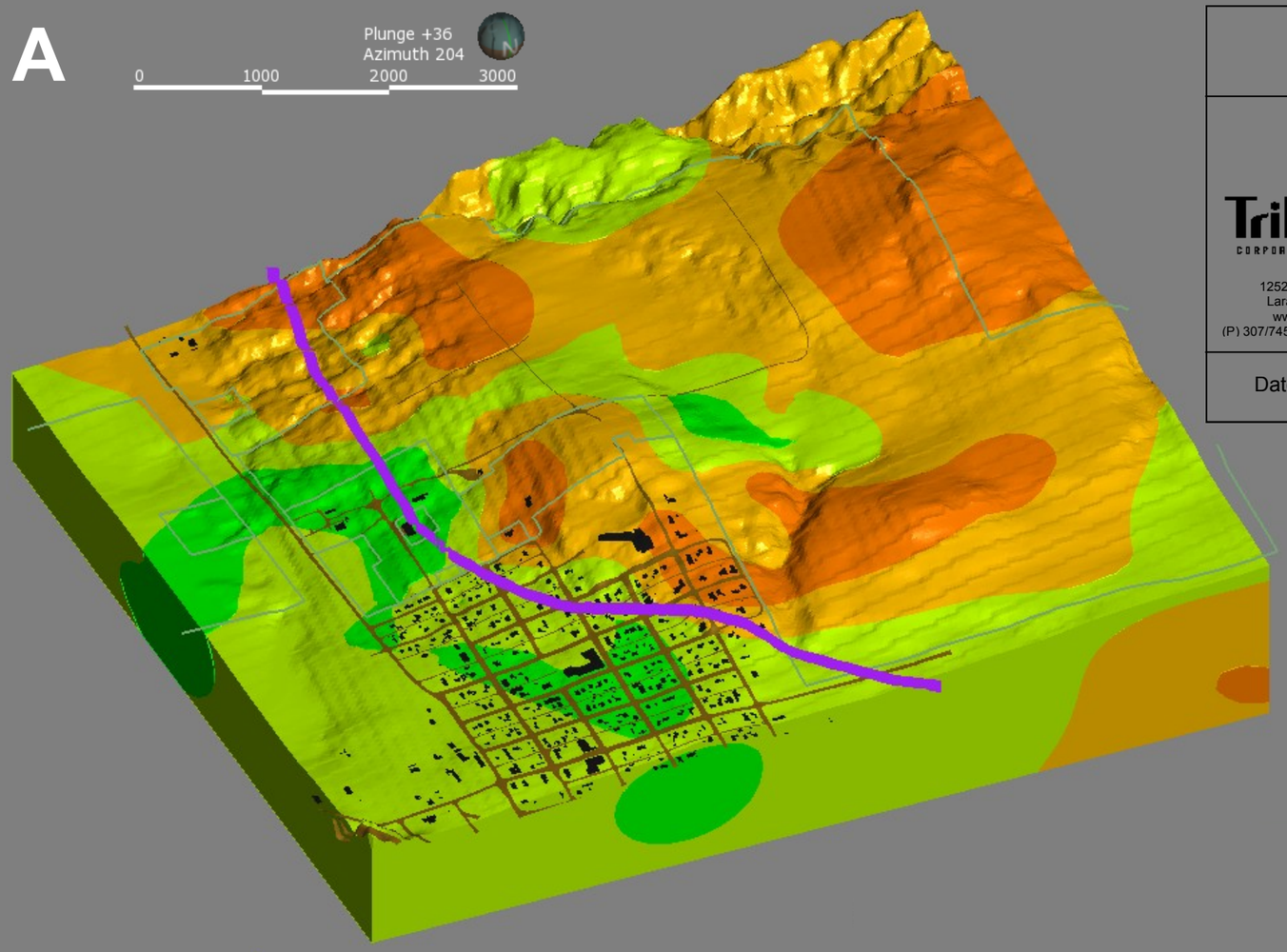
EXPLANATION

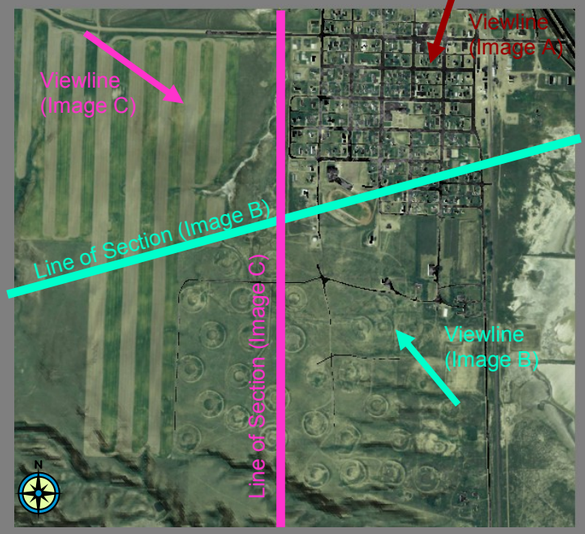
- Structures
- Roads
- Property Boundaries (March 2012)
- Approximate Glacial Drift - Alluvial Sediments Contact

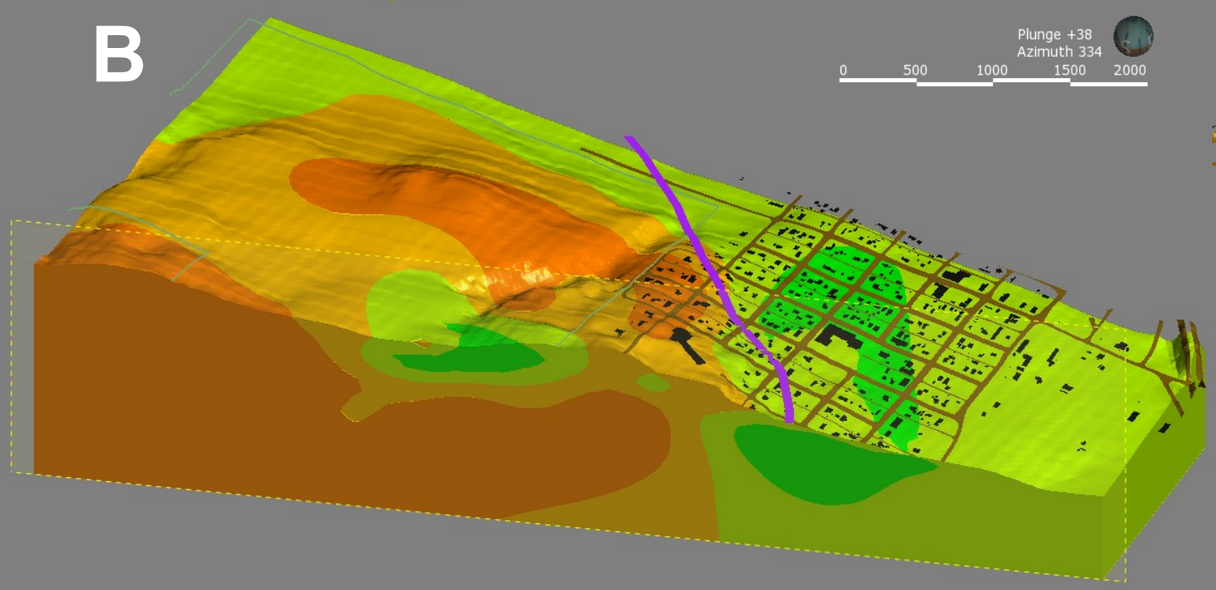
Water-Bearing Zones based on Well Production Classes (See Text)

- Production Class less than 2 (Produces relatively large amounts of water)
- Production Class 2 to 3 (Fair water production)
- Production Class 3 to 4 (Low water production)
- Production Class greater than 4 (Dry or Nearly Dry)

6 times vertical exaggeration







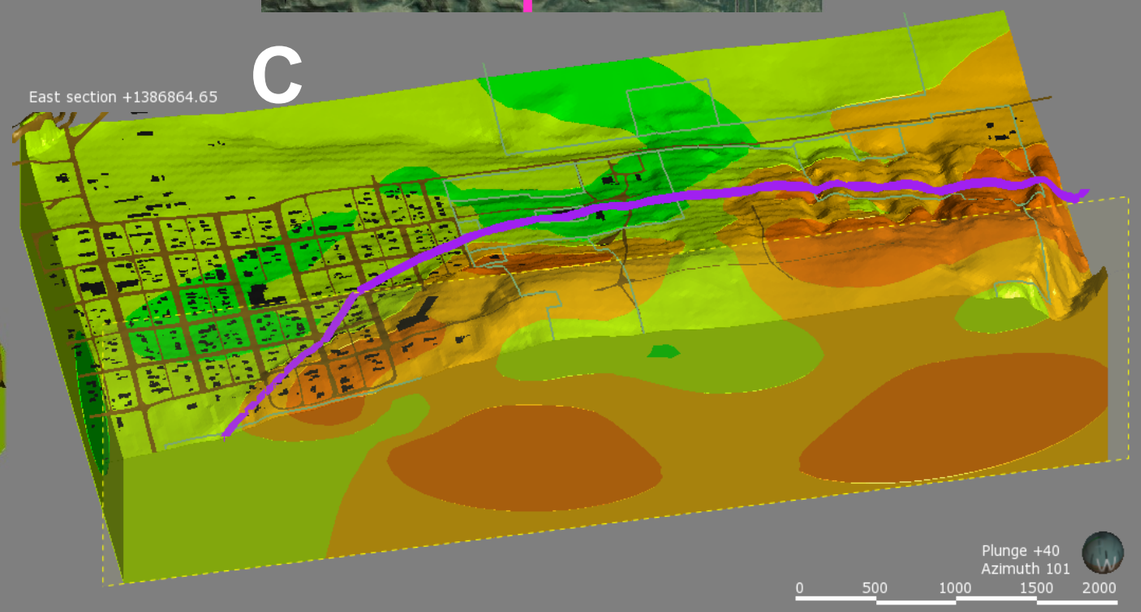
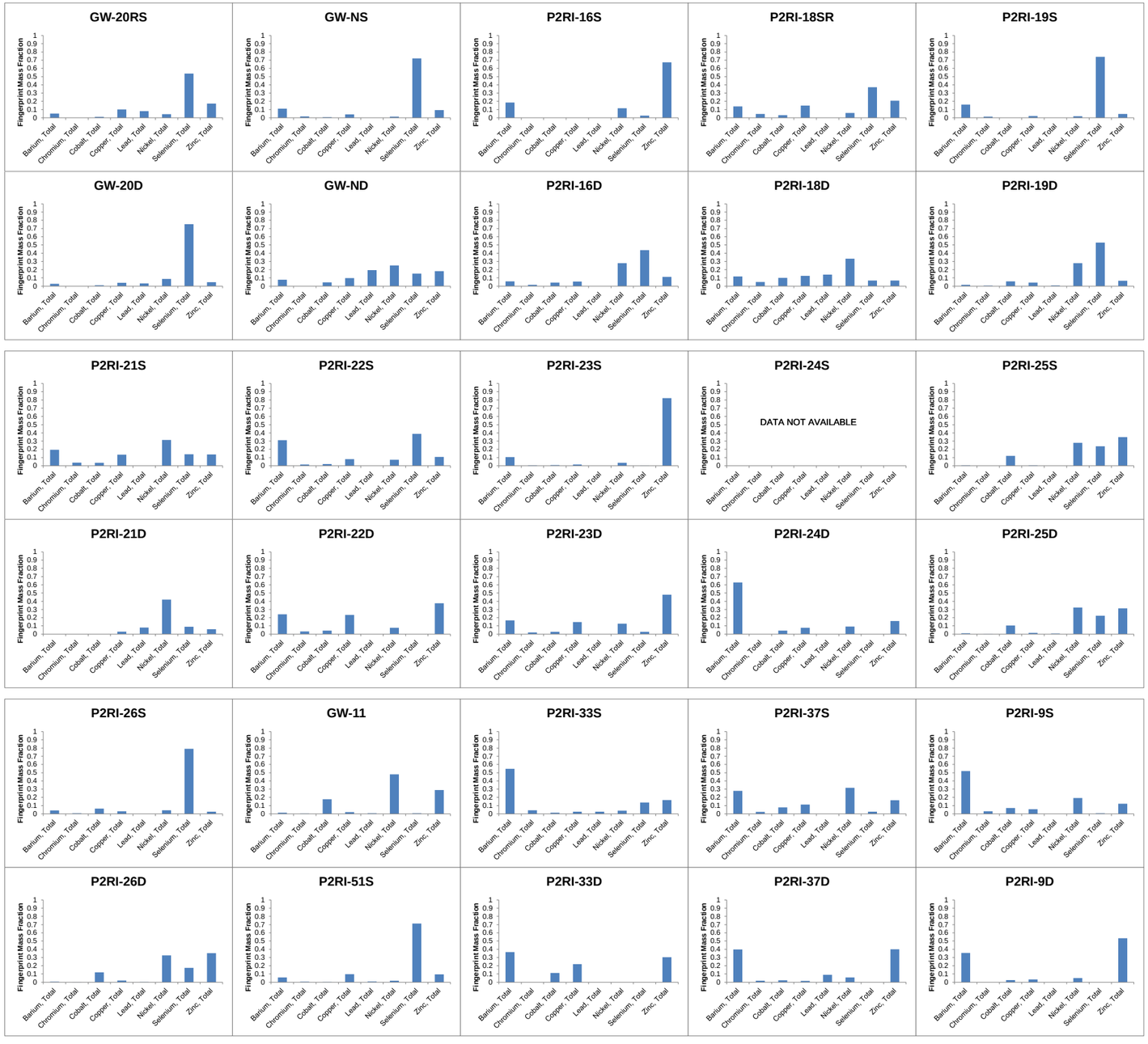
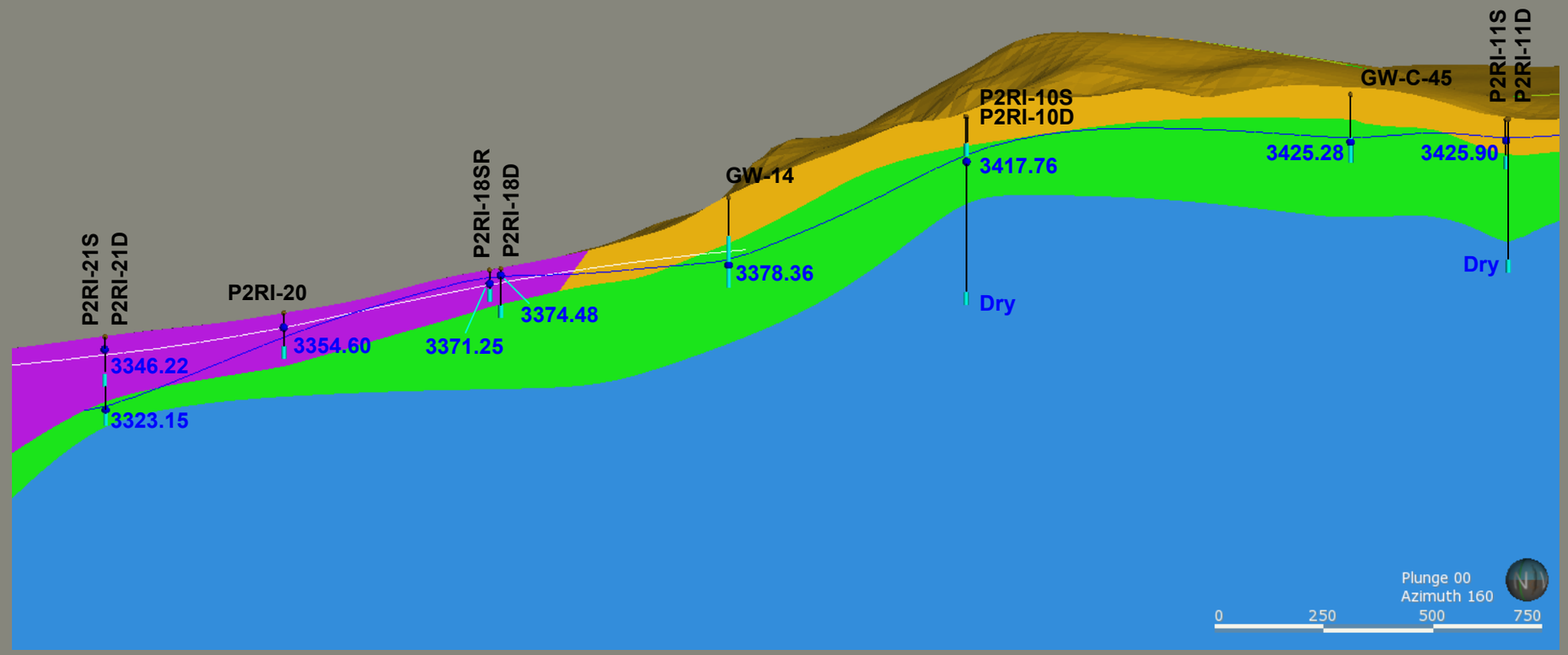


FIGURE 7.1-6. FALCON FINGERPRINT HISTOGRAMS OF METALS MASS FRACTIONS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA





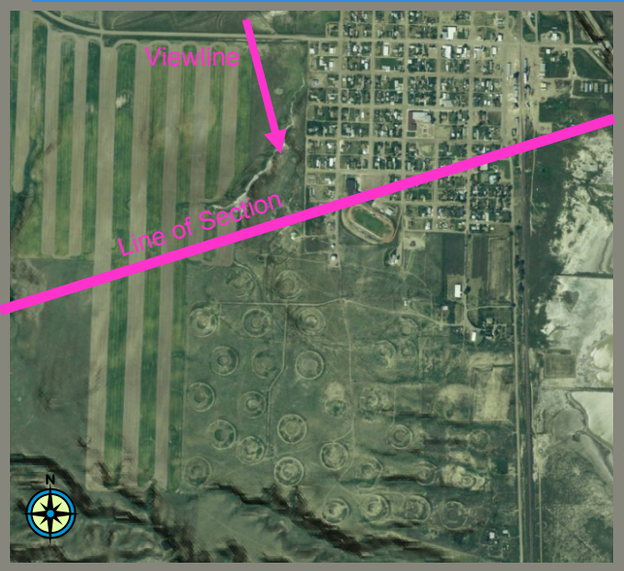


FIGURE 7.1-7 CROSS SECTION OF GEOLOGIC UNITS AND POTENTIOMETRIC SURFACES
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 9/6/2012

EXPLANATION

- March 2012 Potentiometric Surface in Alluvial Sediments Unit
- March 2012 Potentiometric Surface in Weathered Shale Unit

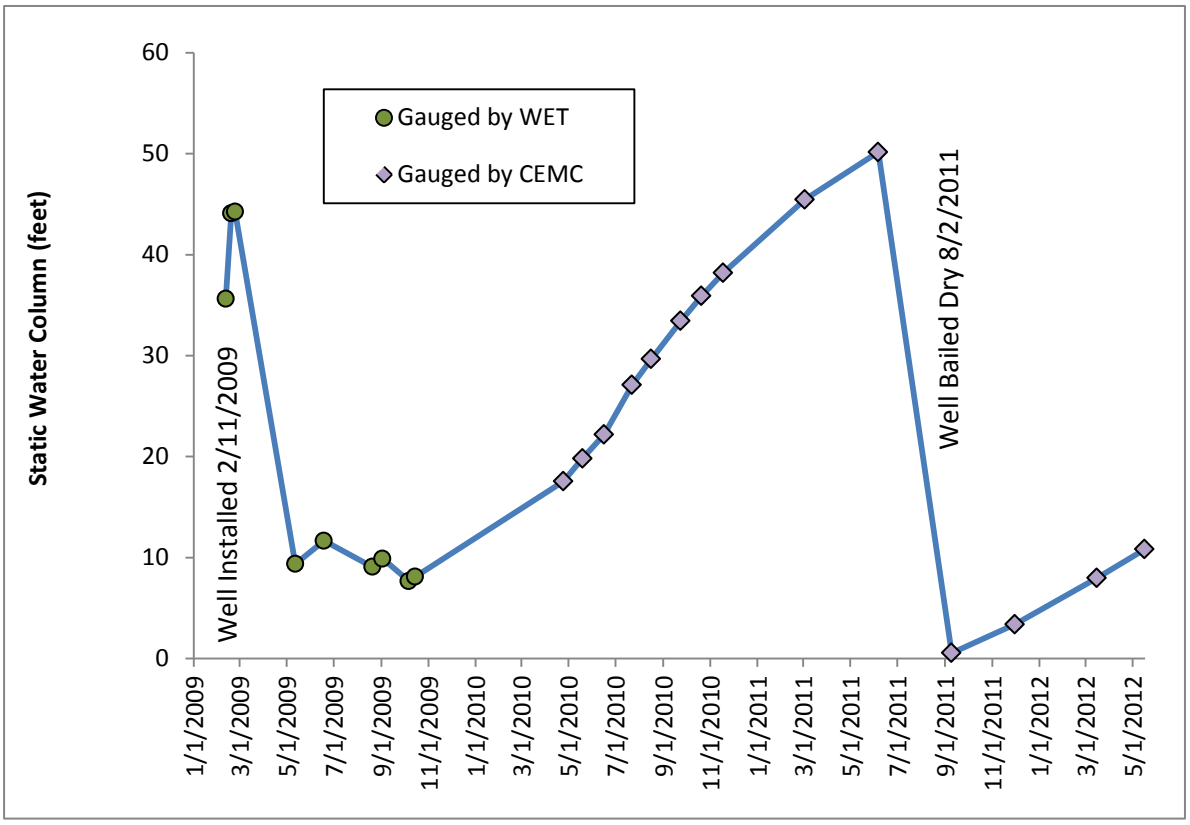
Geologic Units

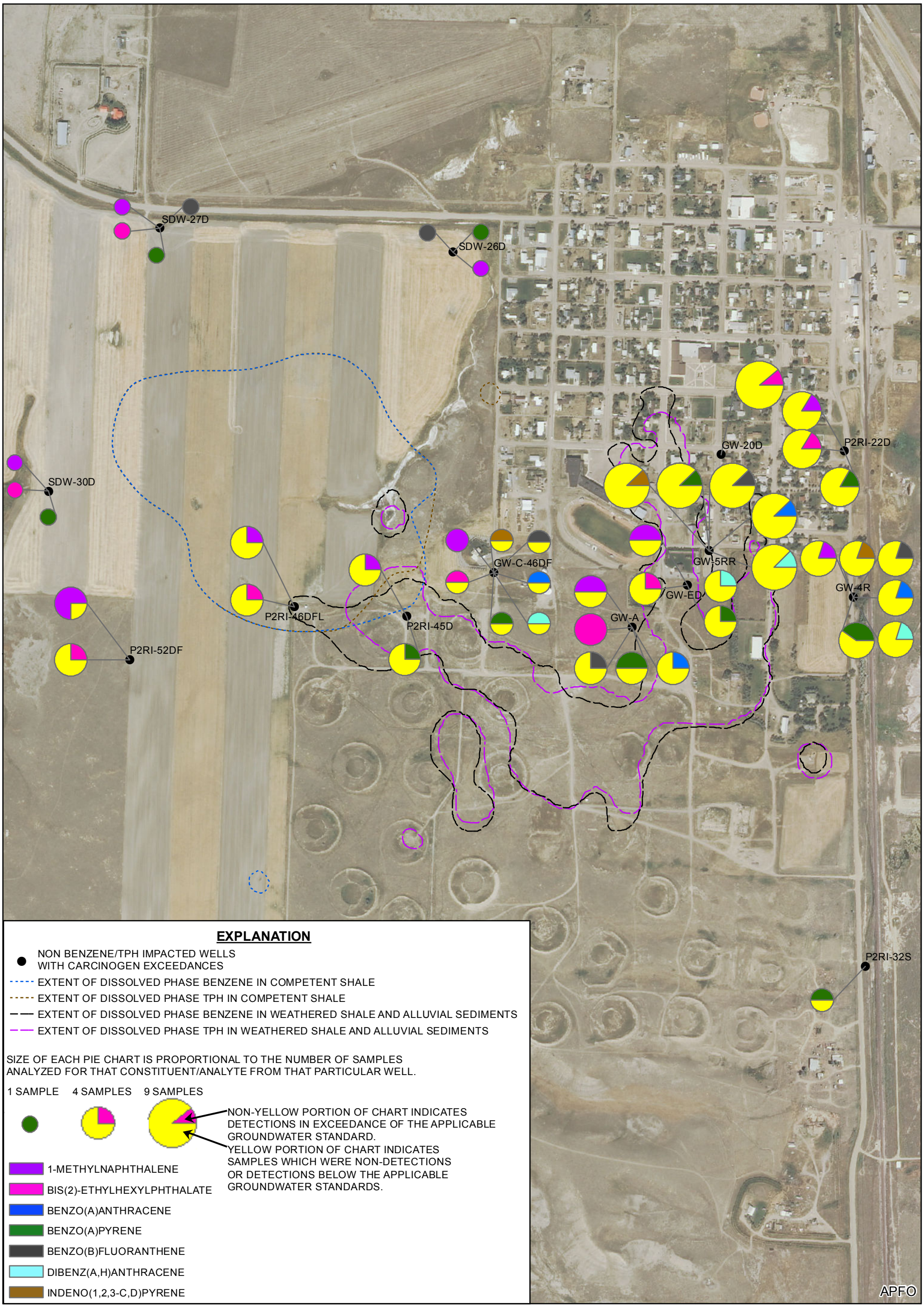
- Overburden—Glacial Drift
- Overburden—Alluvial Sediments
- Weathered Shale
- Competent Shale

SDW-23 — Monitoring Well Designation
3375.12 — March 2012 water elevation (feet above mean sea level)
Screened Interval

6 times vertical exaggeration

FIGURE 7.1-8. GROUNDWATER ELEVATION VERSUS TIME AT WELL SDW-26D
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA





EXPLANATION

- NON BENZENE/TPH IMPACTED WELLS WITH CARCINOGEN EXCEEDANCES
- EXTENT OF DISSOLVED PHASE BENZENE IN COMPETENT SHALE
- EXTENT OF DISSOLVED PHASE TPH IN COMPETENT SHALE
- EXTENT OF DISSOLVED PHASE BENZENE IN WEATHERED SHALE AND ALLUVIAL SEDIMENTS
- EXTENT OF DISSOLVED PHASE TPH IN WEATHERED SHALE AND ALLUVIAL SEDIMENTS

SIZE OF EACH PIE CHART IS PROPORTIONAL TO THE NUMBER OF SAMPLES ANALYZED FOR THAT CONSTITUENT/ANALYTE FROM THAT PARTICULAR WELL.

1 SAMPLE 4 SAMPLES 9 SAMPLES

NON-YELLOW PORTION OF CHART INDICATES DETECTIONS IN EXCEEDANCE OF THE APPLICABLE GROUNDWATER STANDARD.
YELLOW PORTION OF CHART INDICATES SAMPLES WHICH WERE NON-DETECTIONS OR DETECTIONS BELOW THE APPLICABLE GROUNDWATER STANDARDS.

- 1-METHYLNAPHTHALENE
- BIS(2)-ETHYLHEXYLPHTHALATE
- BENZO(A)ANTHRACENE
- BENZO(A)PYRENE
- BENZO(B)FLUORANTHENE
- DIBENZ(A,H)ANTHRACENE
- INDENO(1,2,3-C,D)PYRENE

NOTES:

- PIE CHARTS SHOWN ONLY FOR WELLS NOT IDENTIFIED AS IMPACTED BY BENZENE OR TPH BY THE ANALYSIS DESCRIBED IN SECTION 7.2.2.1 OF THE PHASE II RI REPORT.

- PIE CHARTS SHOWN FOR ALL CARCINOGENS THAT EXCEEDED THE APPLICABLE GROUNDWATER STANDARD IN AT LEAST ONE SAMPLE COLLECTED BY CEMC.

N

0 650 '

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FIGURE 7.2-A

EXCEEDANCES OF GROUNDWATER STANDARDS FOR CARCINOGENS AT WELLS NOT IMPACTED BY BENZENE OR TPH

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 650 '	Date: 11/5/13	File: Fig_P2RI_NonBTPH_Exceedances.mxd

FIGURE 7.2-B. GW-20D, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

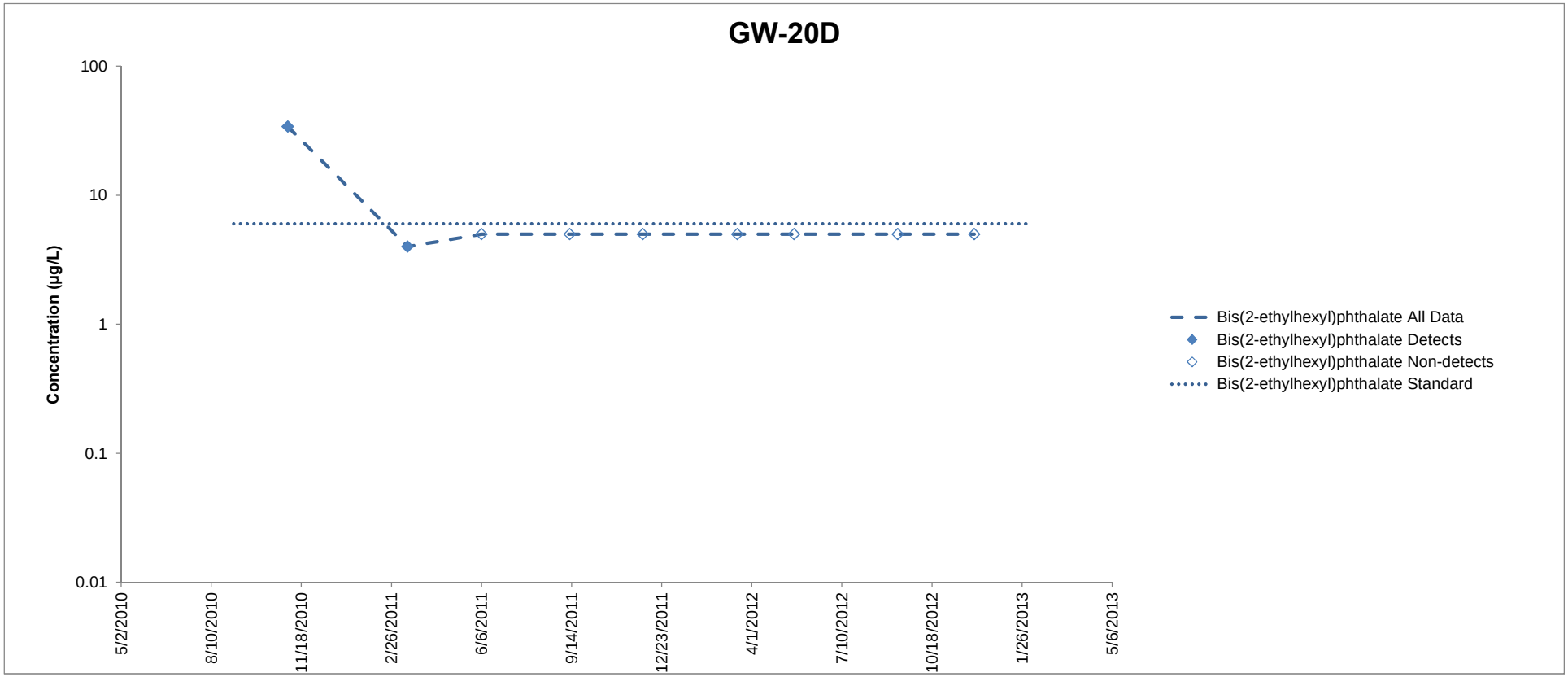


FIGURE 7.2-C. GW-4R, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

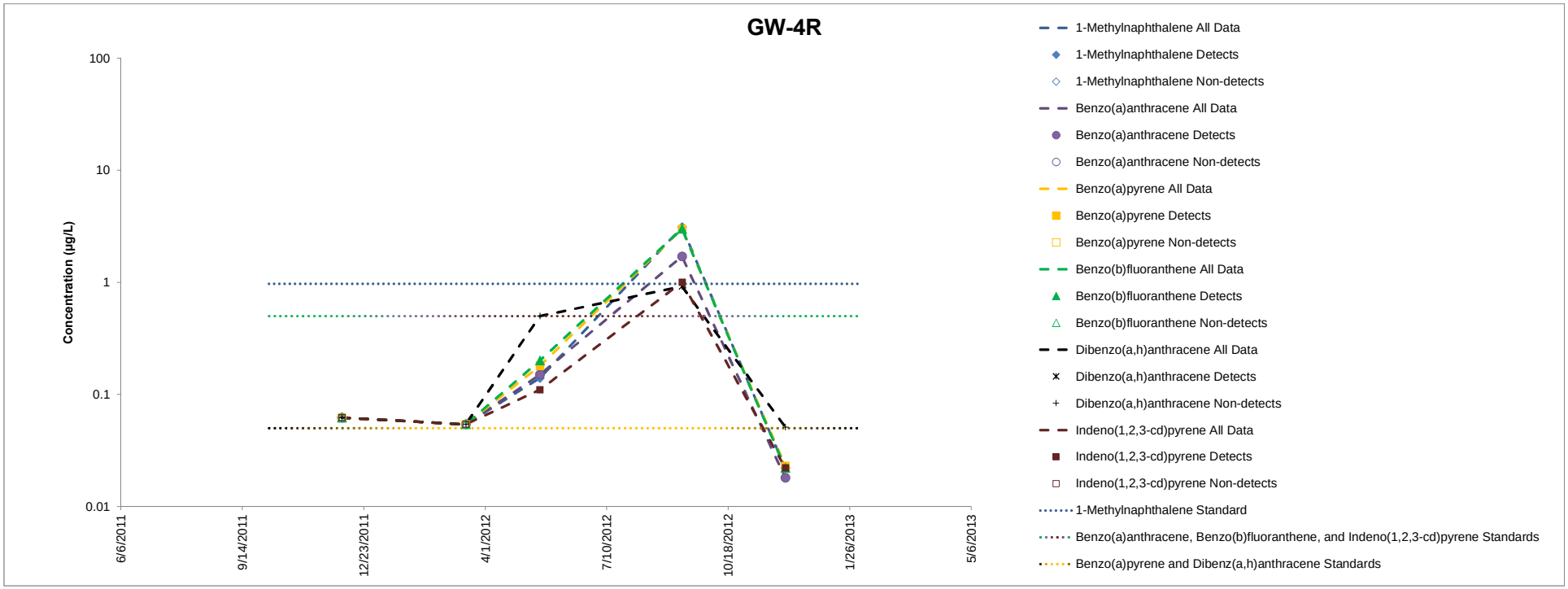


FIGURE 7.2-D. GW-5RR, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

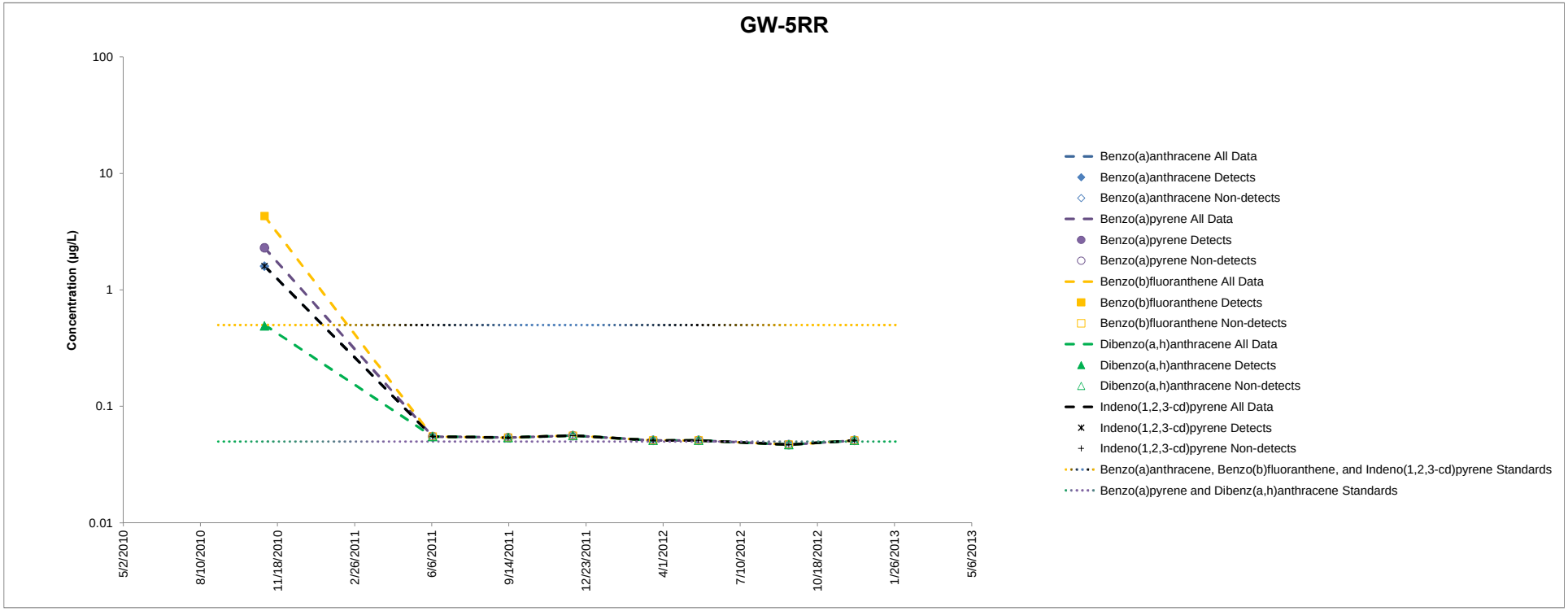


FIGURE 7.2-E. GW-A, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

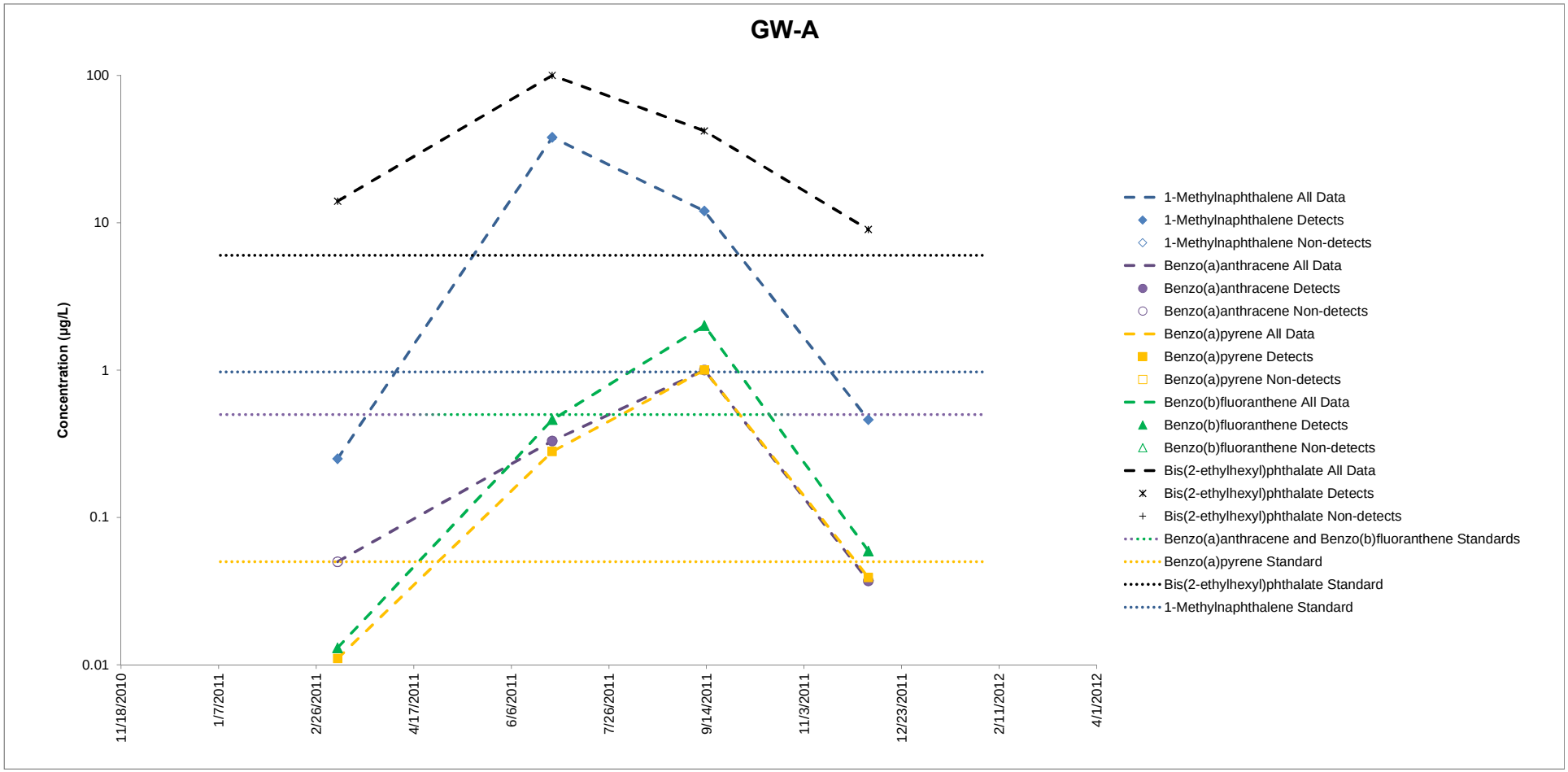


FIGURE 7.2-F. GW-C-46DF, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

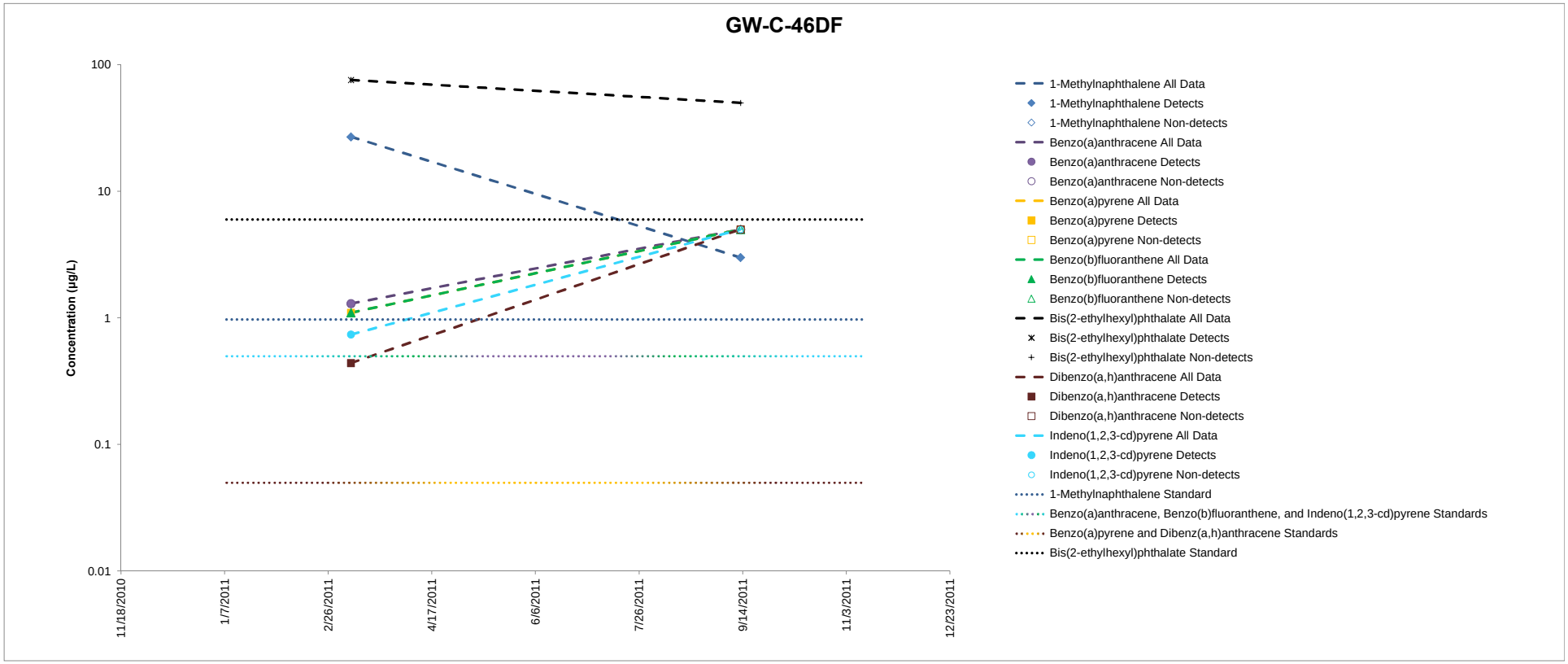


FIGURE 7.2-G. GW-ED, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

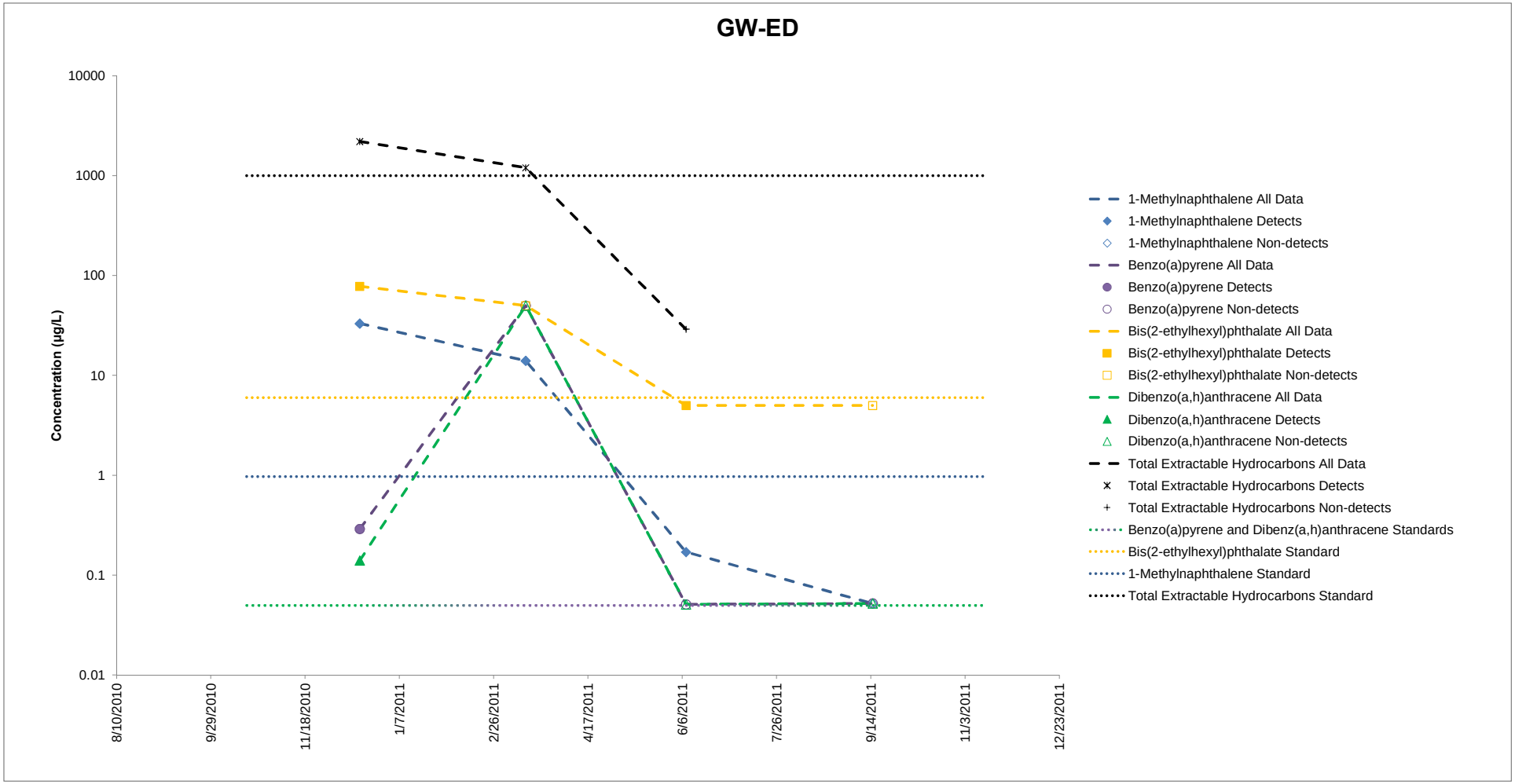


FIGURE 7.2-H. P2RI-22D, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

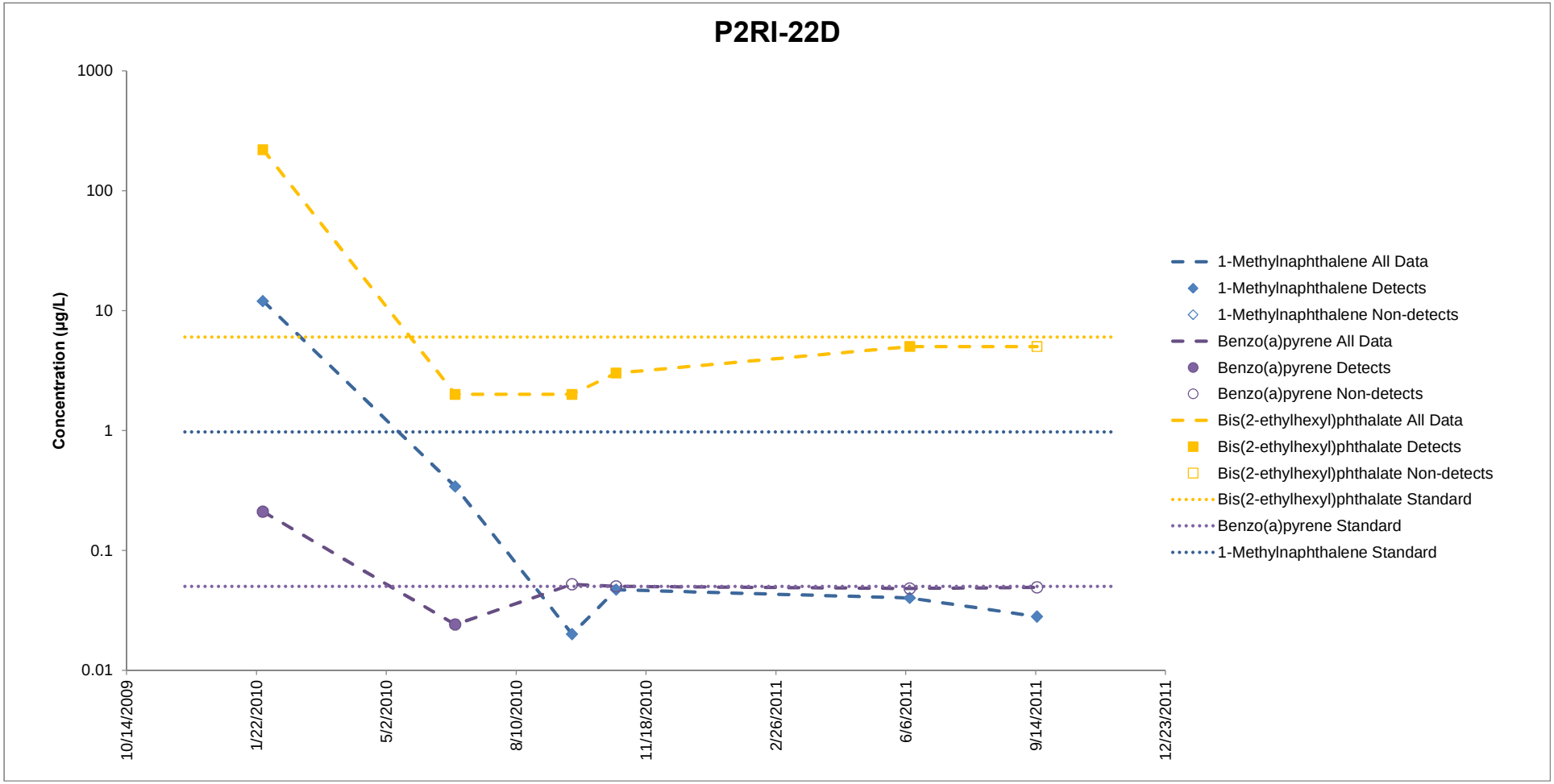


FIGURE 7.2-I. P2RI-32S, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

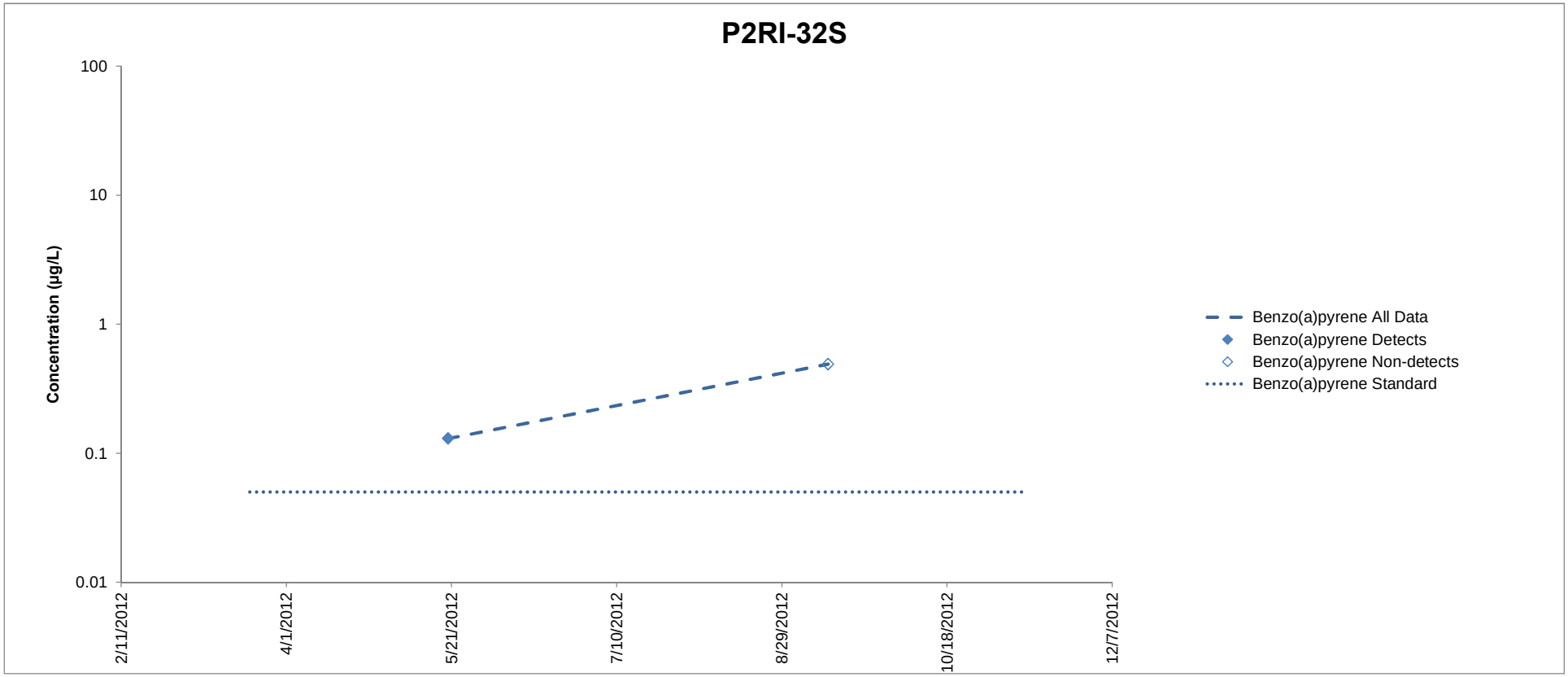


FIGURE 7.2-J. P2RI-45D, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

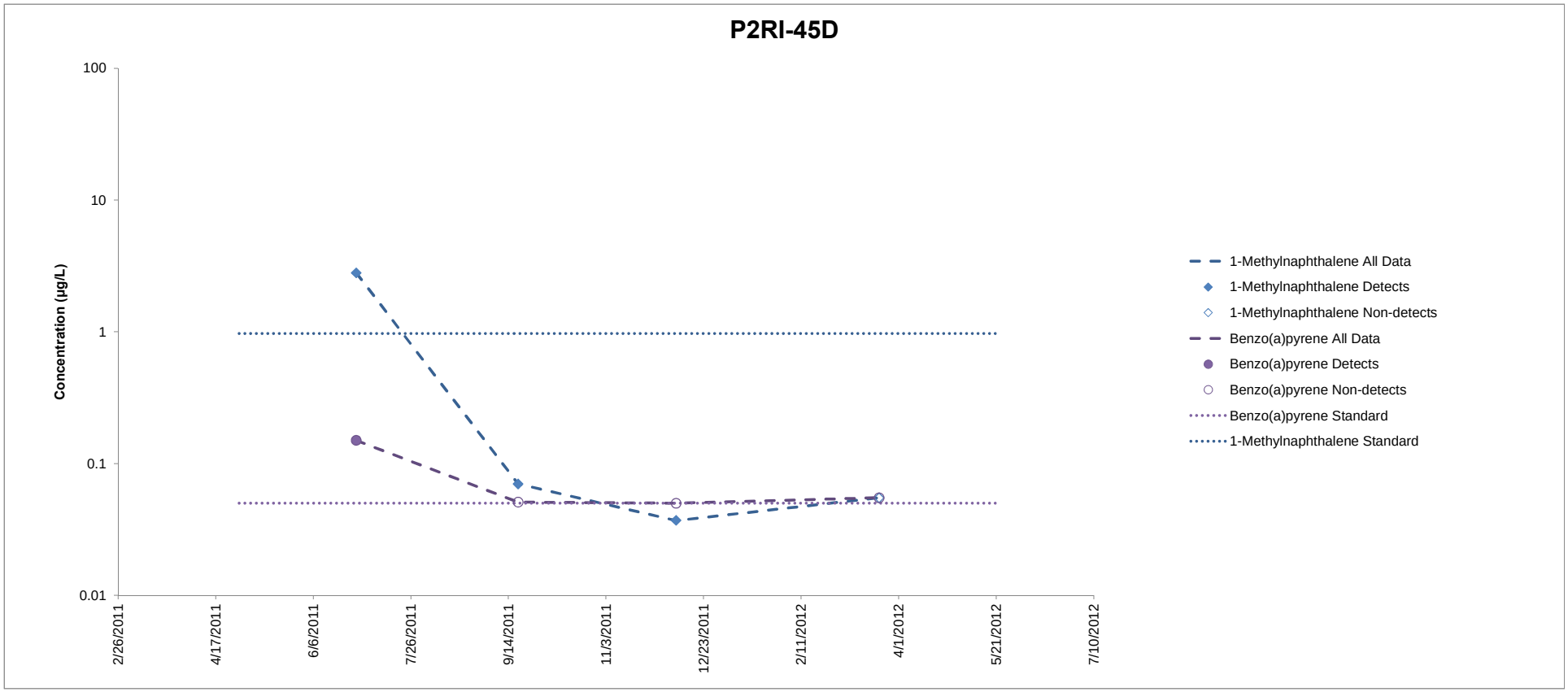


FIGURE 7.2-K. P2RI-46DFL, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

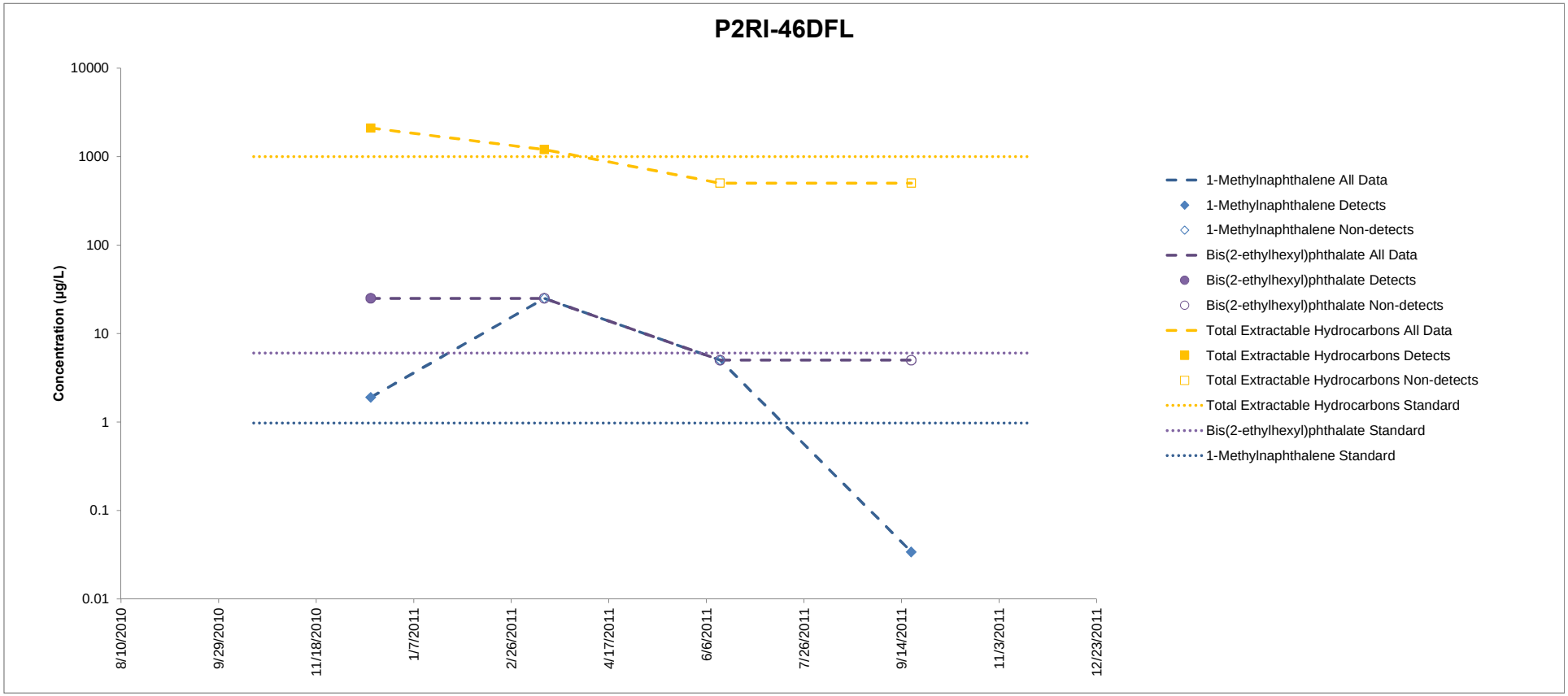


FIGURE 7.2-L. P2RI-52DF, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

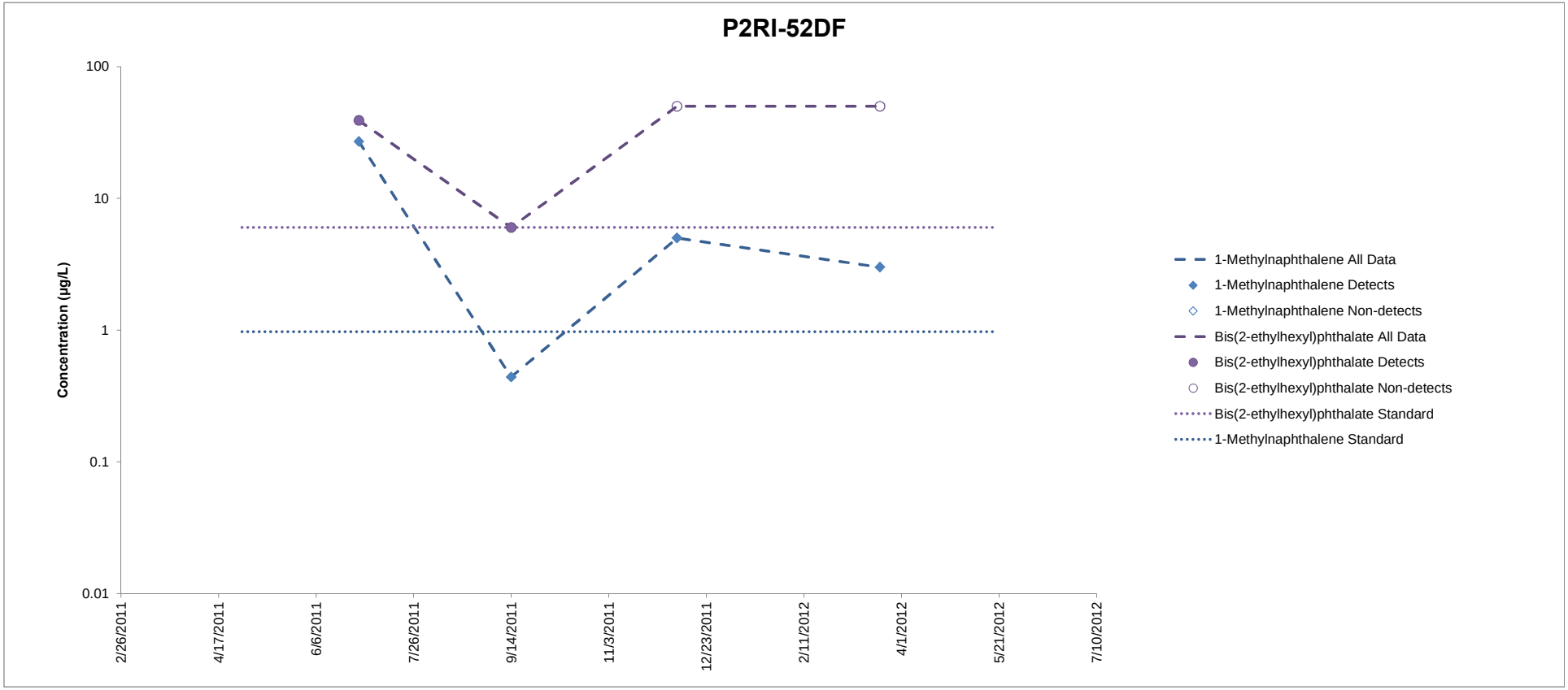


FIGURE 7.2-M. SDW-26D, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

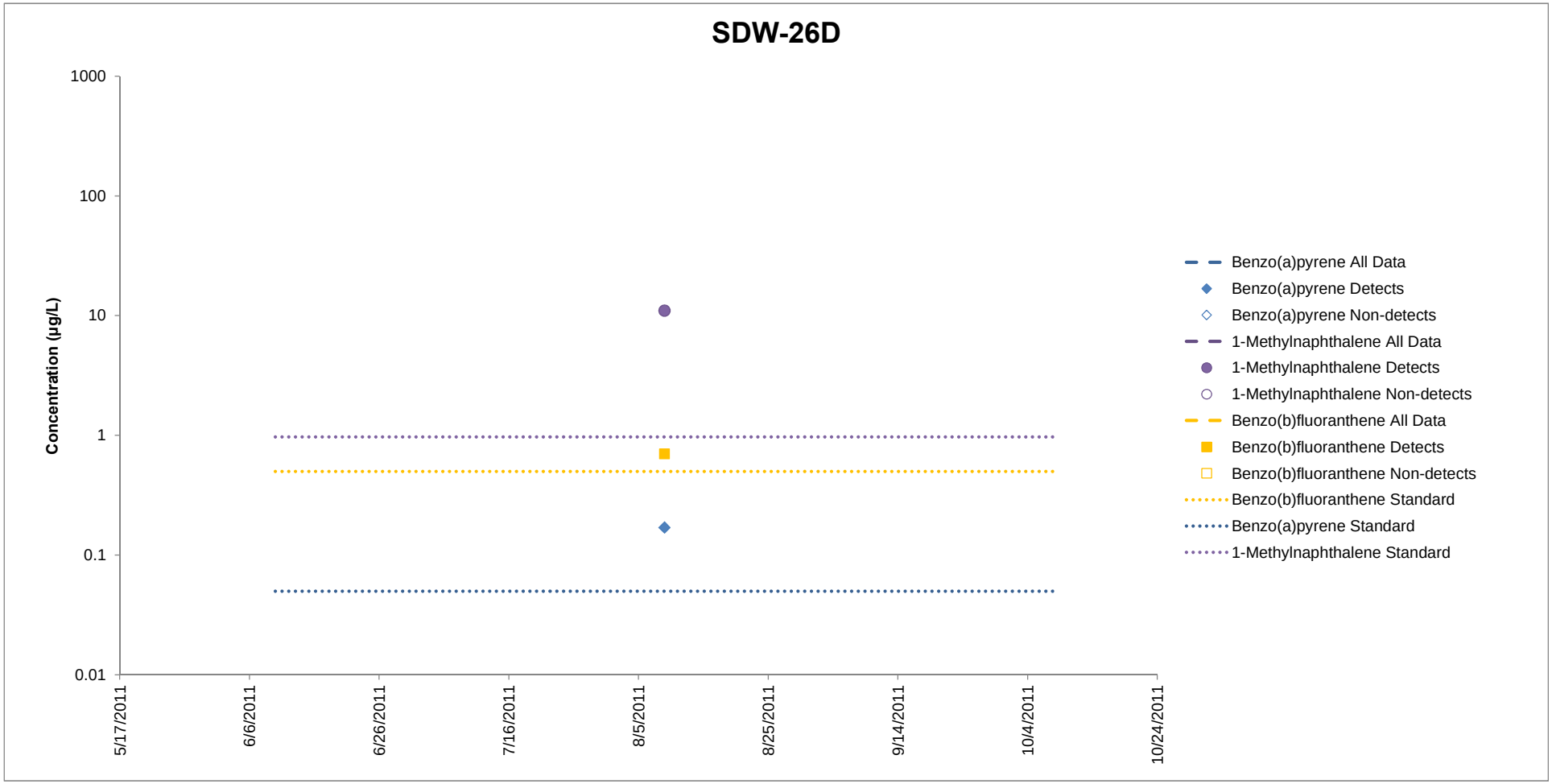


FIGURE 7.2-N. SDW-27D, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

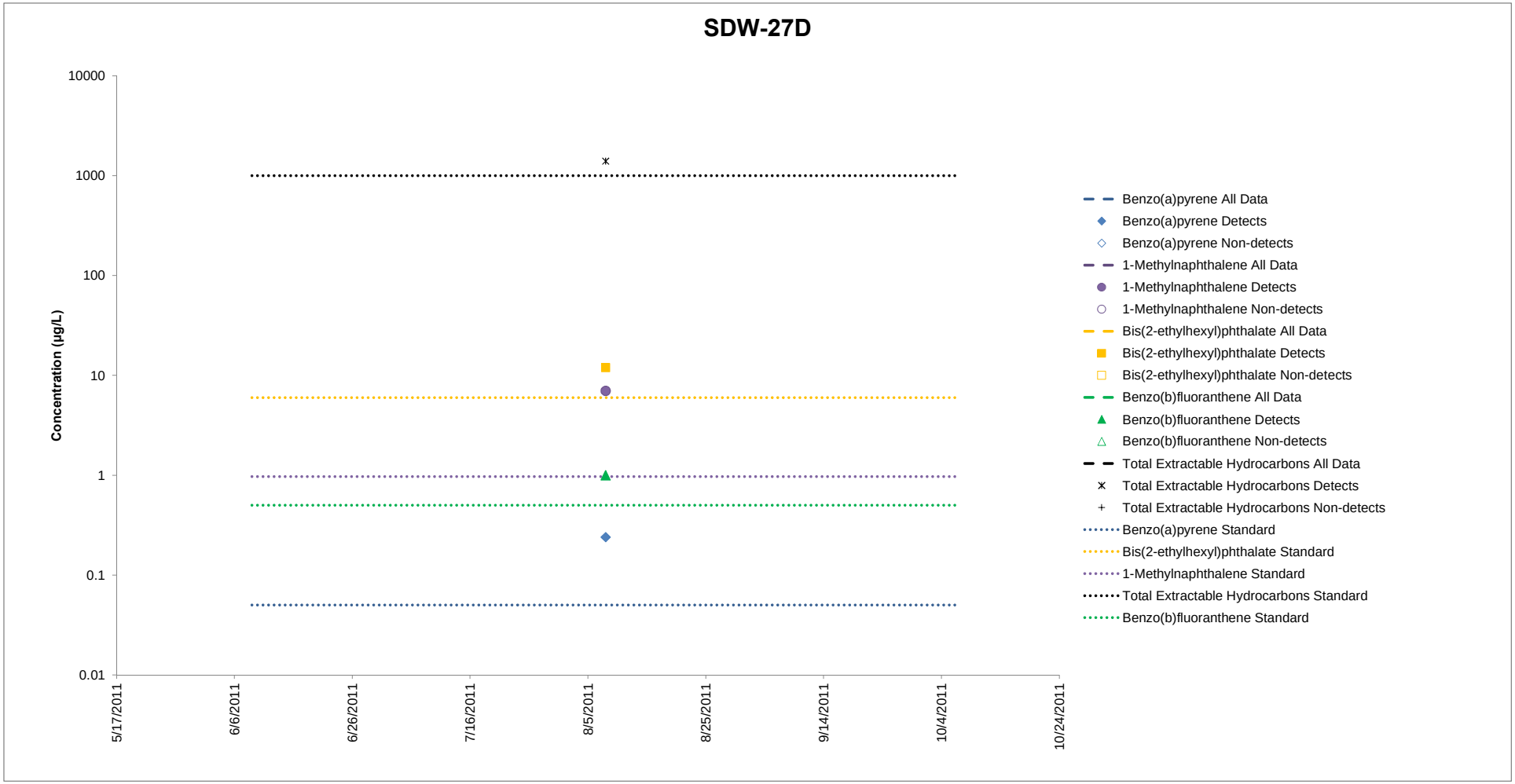
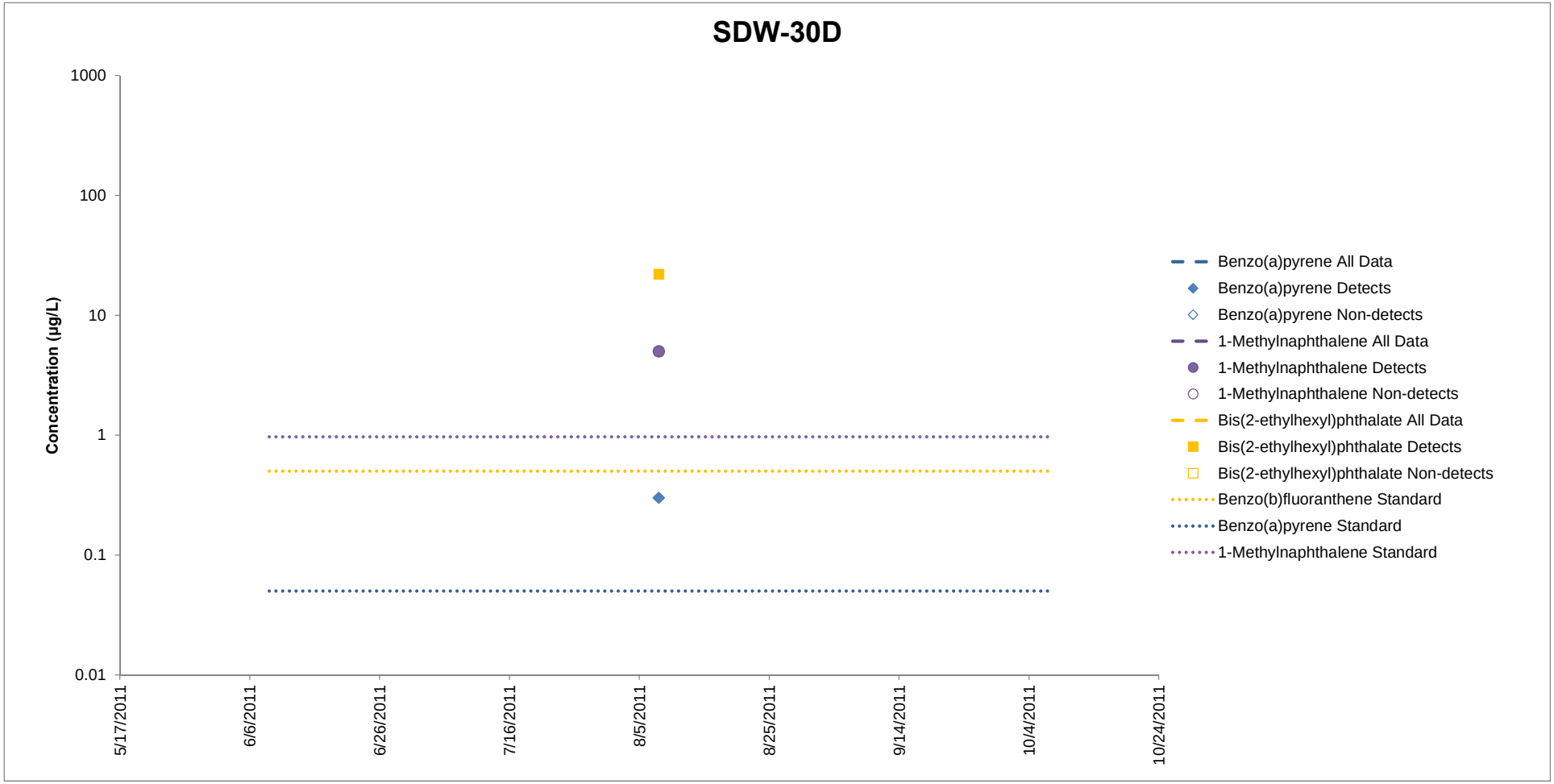
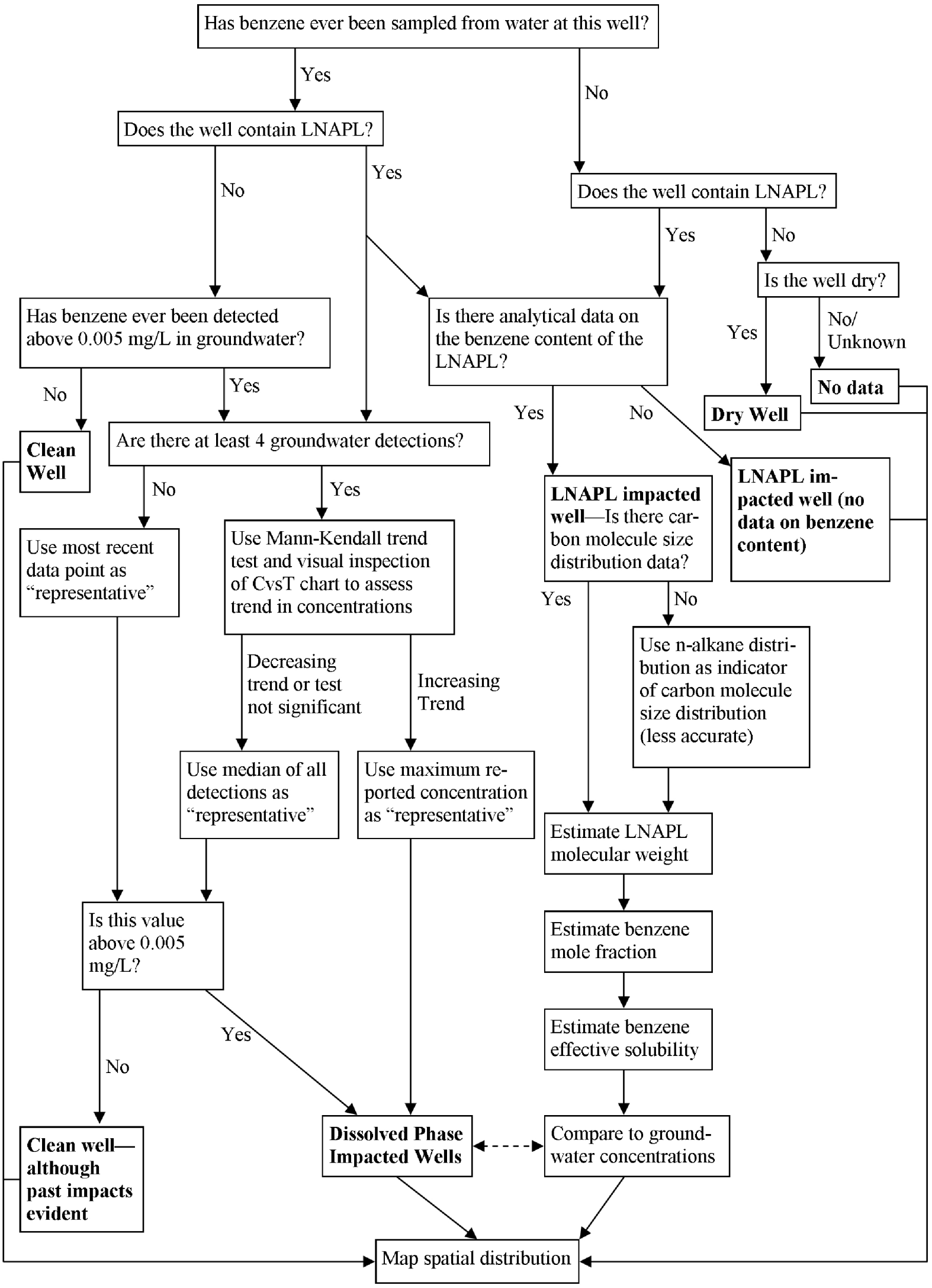


FIGURE 7.2-O. SDW-30D, CONCENTRATIONS VERSUS TIME
CARCINOGENS EXCEEDING GROUNDWATER STANDARDS (EXCLUDING BENZENE AND TPH)
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA





NOTES:
LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

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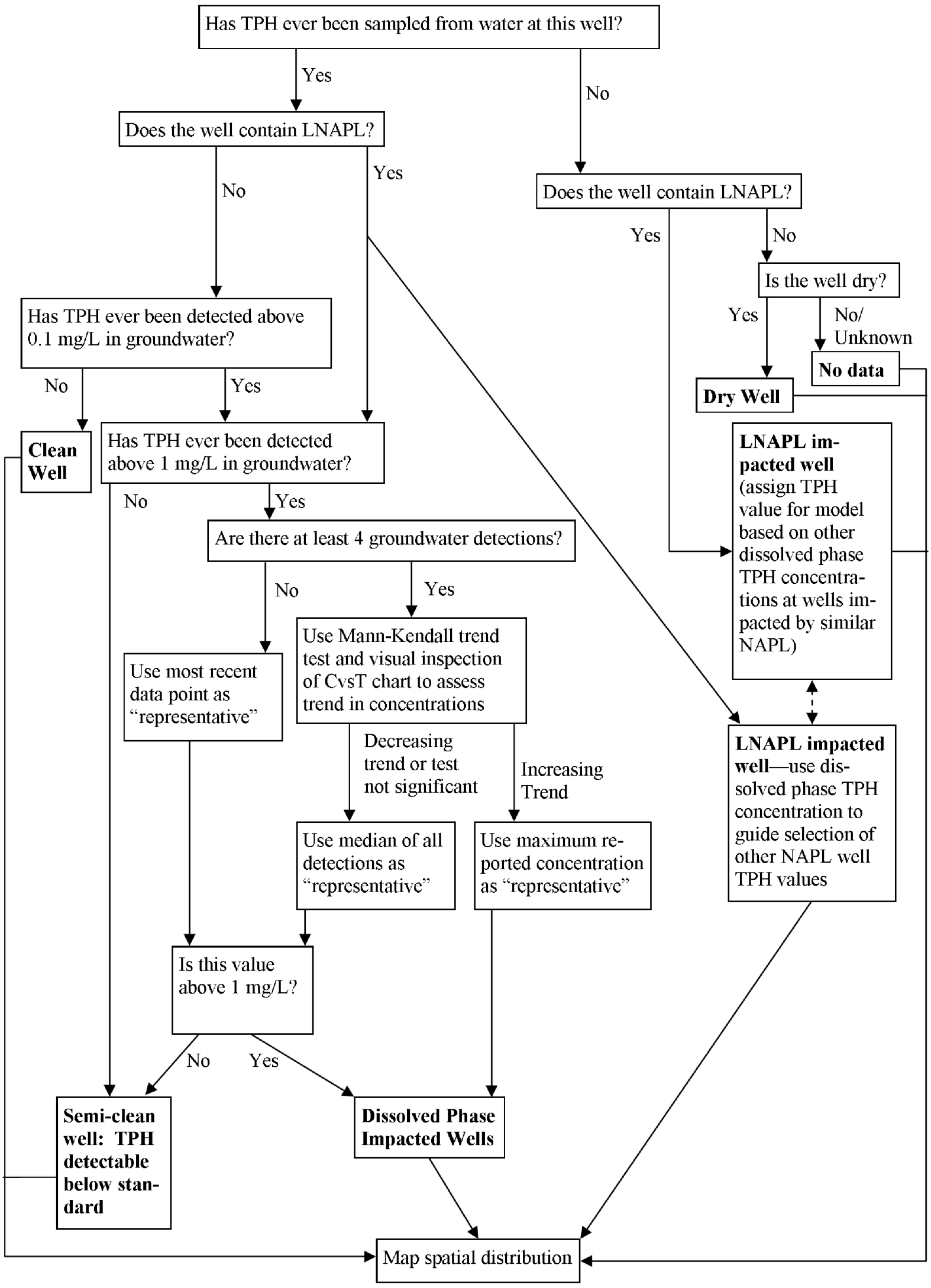
FIGURE 7.2-1

BENZENE DATA VALUE SELECTION PROCESS

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: NONE	Date: 11/12/12	File: Fig_P2RI_BENZFlowChart.mxd



NOTES:
TPH - TOTAL PURGEABLE HYDROCARBONS
LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

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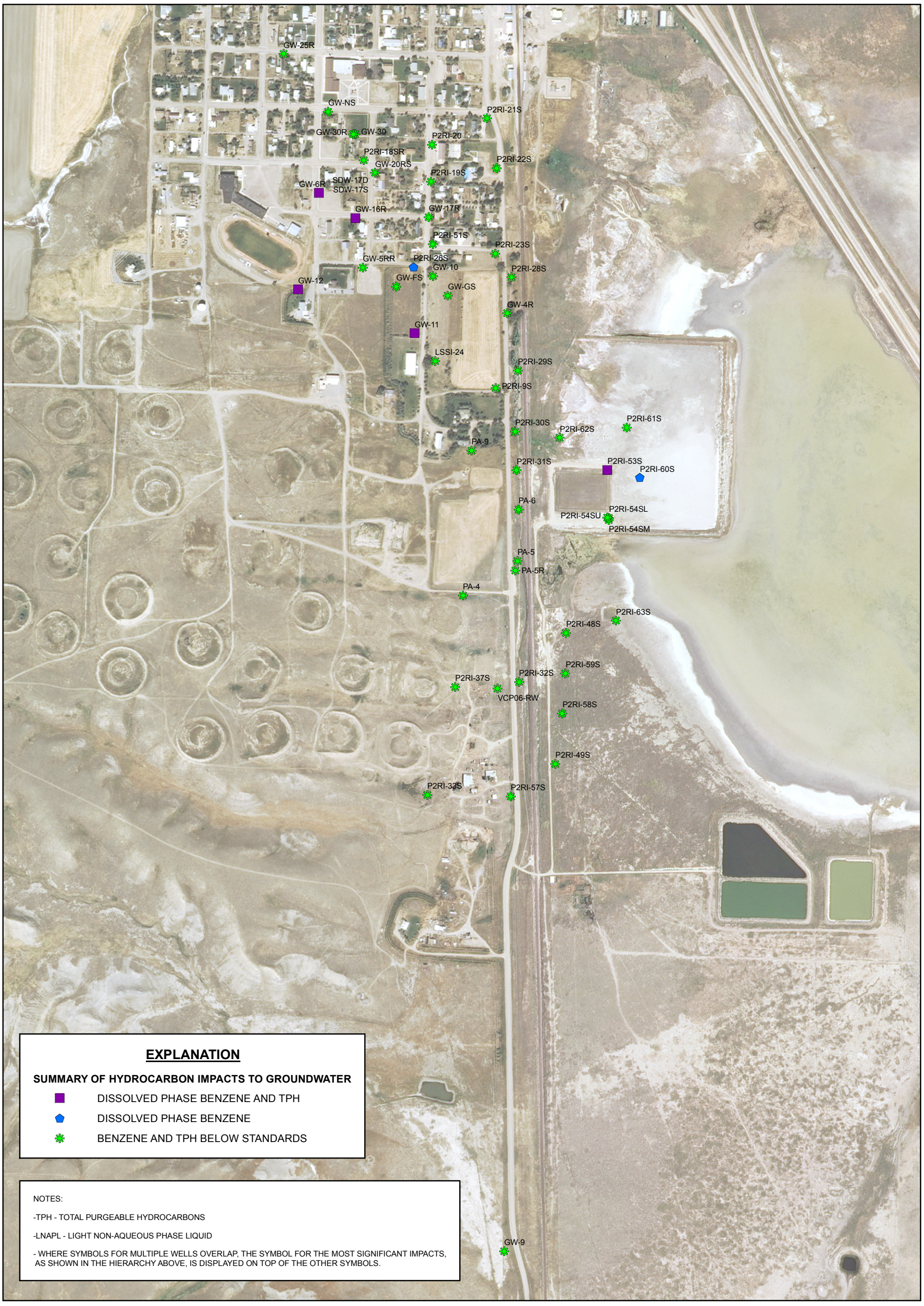
FIGURE 7.2-2

TPH DATA VALUE SELECTION PROCESS

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: NONE	Date: 11/12/12	File: Fig_P2RI_TPHFlowChart.mxd



EXPLANATION

SUMMARY OF HYDROCARBON IMPACTS TO GROUNDWATER

- DISSOLVED PHASE BENZENE AND TPH
- DISSOLVED PHASE BENZENE
- BENZENE AND TPH BELOW STANDARDS

NOTES:

-TPH - TOTAL PURGEABLE HYDROCARBONS

-LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

- WHERE SYMBOLS FOR MULTIPLE WELLS OVERLAP, THE SYMBOL FOR THE MOST SIGNIFICANT IMPACTS, AS SHOWN IN THE HIERARCHY ABOVE, IS DISPLAYED ON TOP OF THE OTHER SYMBOLS.

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N

0 650 '

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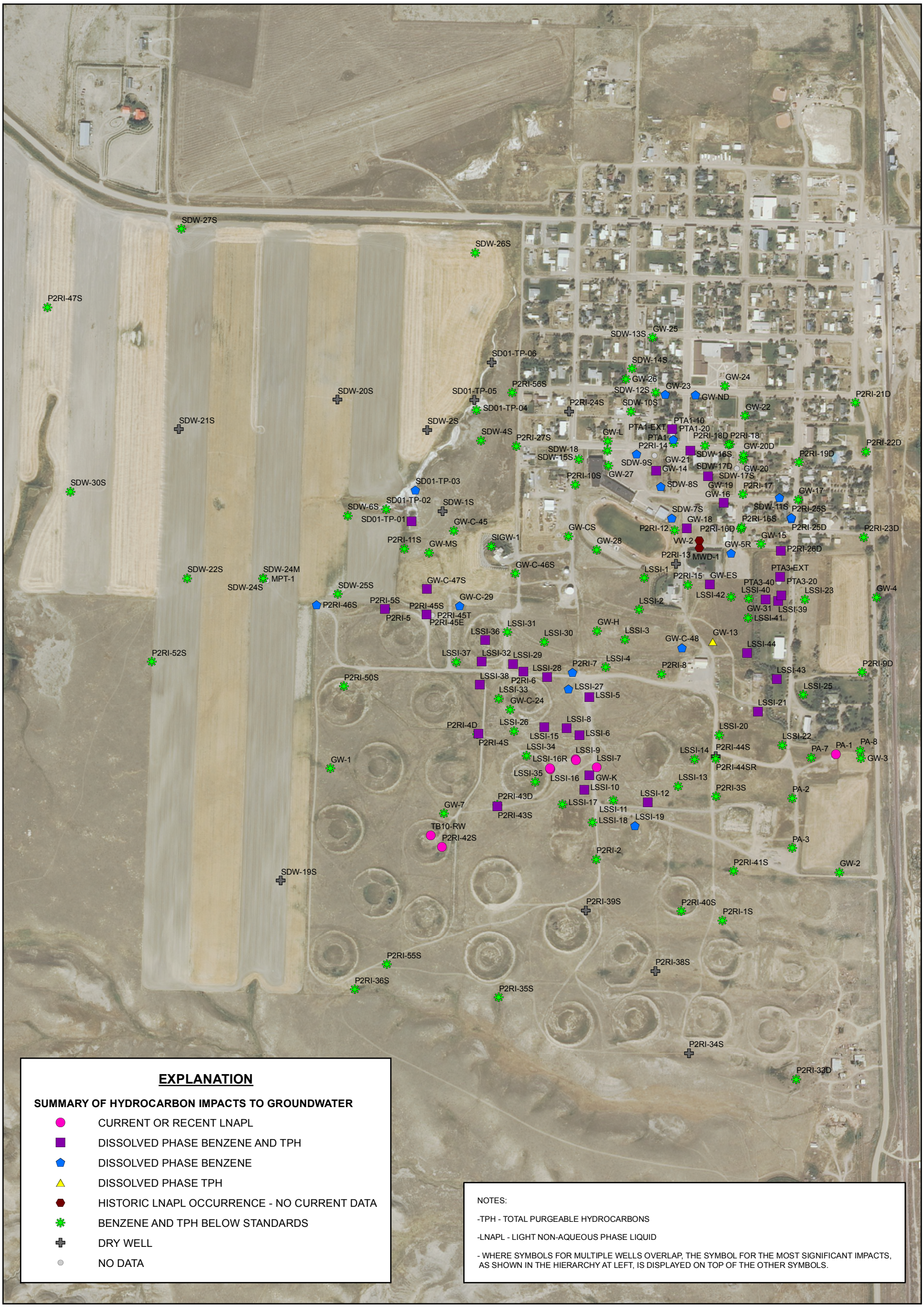
FIGURE 7.2-3

HYDROCARBON IMPACTS TO GROUNDWATER ALLUVIAL SEDIMENTS HYDROSTRATIGRAPHIC UNIT

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 650 '	Date: 11/5/13	File: Fig_P2RI_OVRBGWImpacts.mxd



EXPLANATION

SUMMARY OF HYDROCARBON IMPACTS TO GROUNDWATER

- CURRENT OR RECENT LNAPL
- DISSOLVED PHASE BENZENE AND TPH
- DISSOLVED PHASE BENZENE
- DISSOLVED PHASE TPH
- HISTORIC LNAPL OCCURRENCE - NO CURRENT DATA
- BENZENE AND TPH BELOW STANDARDS
- DRY WELL
- NO DATA

NOTES:

-TPH - TOTAL PURGEABLE HYDROCARBONS

-LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

- WHERE SYMBOLS FOR MULTIPLE WELLS OVERLAP, THE SYMBOL FOR THE MOST SIGNIFICANT IMPACTS, AS SHOWN IN THE HIERARCHY AT LEFT, IS DISPLAYED ON TOP OF THE OTHER SYMBOLS.

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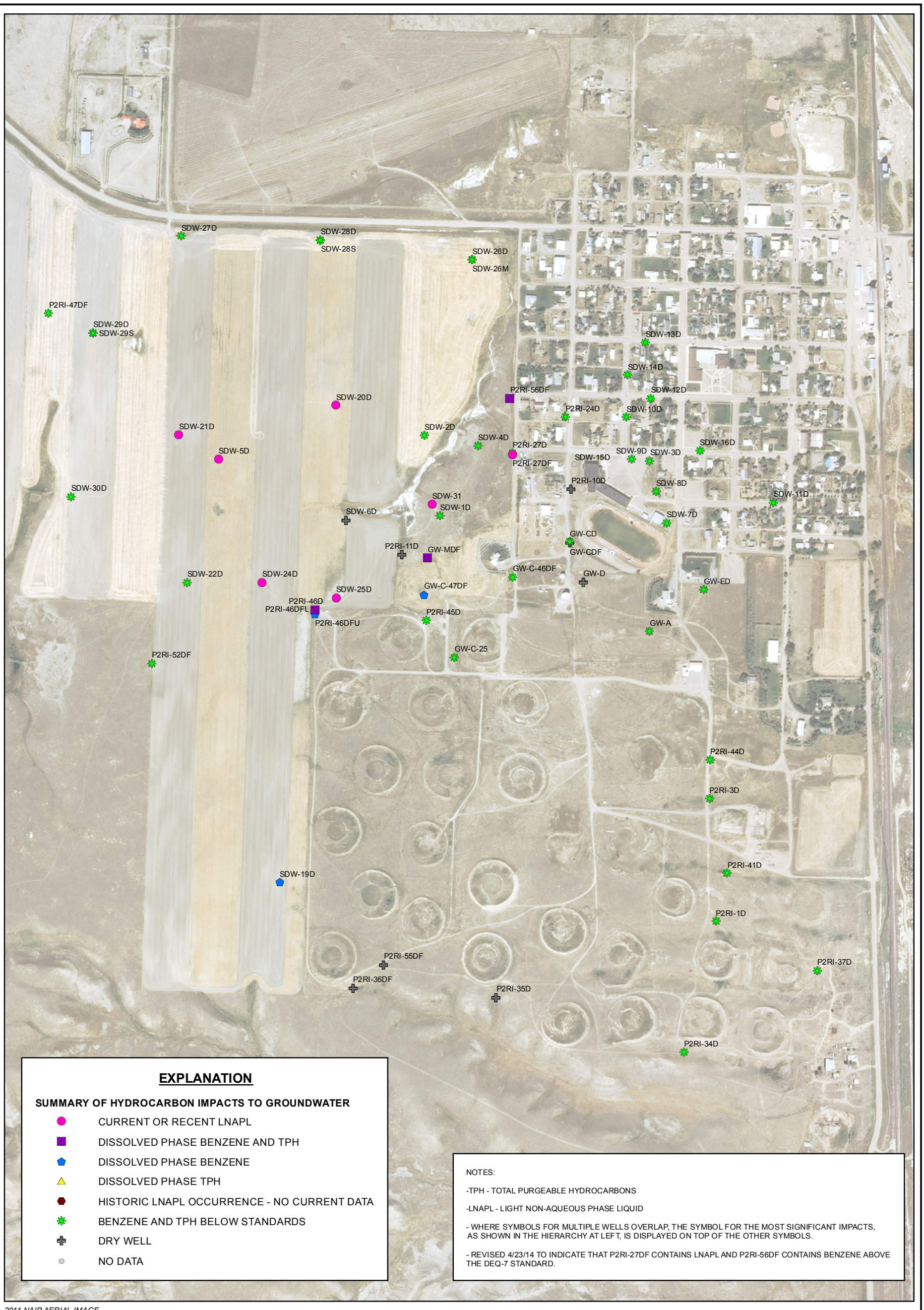
FIGURE 7.2-4

HYDROCARBON IMPACTS TO GROUNDWATER WEATHERED SHALE HYDROSTRATIGRAPHIC UNIT

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 650 '	Date: 12/26/12	File: Fig_P2RI_WSGWImpacts.mxd



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0 650 '

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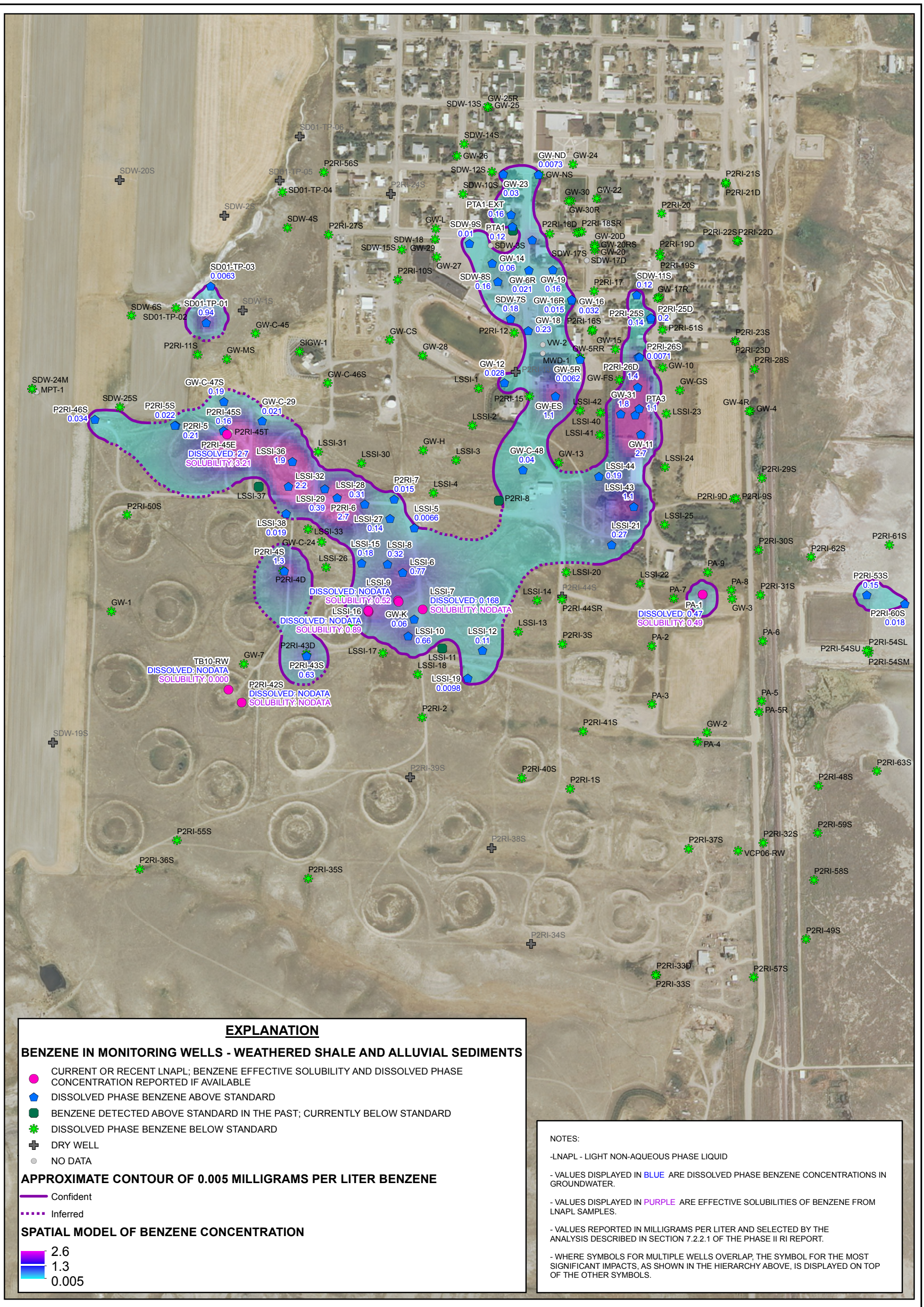
FIGURE 7.2-5

HYDROCARBON IMPACTS TO GROUNDWATER COMPETENT SHALE HYDROSTRATIGRAPHIC UNIT

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 650 '	Date: 4/24/14	File: Fig_P2RI_COMPGWImpacts.mxd



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0 550'

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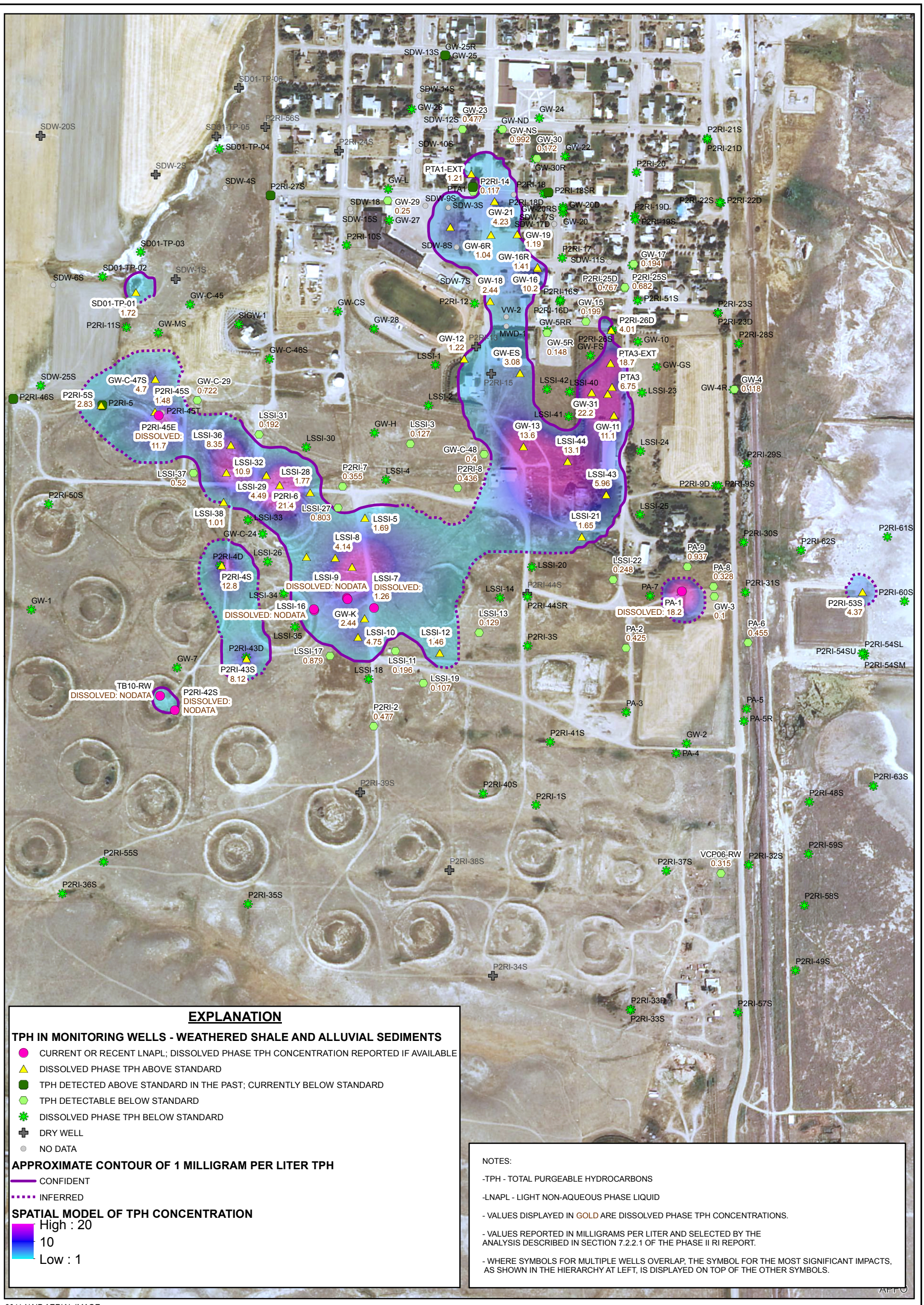
FIGURE 7.2-6

BENZENE CONCENTRATIONS IN GROUNDWATER WEATHERED SHALE AND ALLUVIAL SEDIMENTS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 550 '	Date: 11/4/13	File: Fig_P2RI_Shallow_Benzene.mxd



EXPLANATION

TPH IN MONITORING WELLS - WEATHERED SHALE AND ALLUVIAL SEDIMENTS

- CURRENT OR RECENT LNAPL; DISSOLVED PHASE TPH CONCENTRATION REPORTED IF AVAILABLE
- DISSOLVED PHASE TPH ABOVE STANDARD
- TPH DETECTED ABOVE STANDARD IN THE PAST; CURRENTLY BELOW STANDARD
- TPH DETECTABLE BELOW STANDARD
- DISSOLVED PHASE TPH BELOW STANDARD
- DRY WELL
- NO DATA

APPROXIMATE CONTOUR OF 1 MILLIGRAM PER LITER TPH

- CONFIDENT
- INFERRED

SPATIAL MODEL OF TPH CONCENTRATION

High : 20
10
Low : 1

NOTES:

-TPH - TOTAL PURGEABLE HYDROCARBONS

-LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

- VALUES DISPLAYED IN GOLD ARE DISSOLVED PHASE TPH CONCENTRATIONS.

- VALUES REPORTED IN MILLIGRAMS PER LITER AND SELECTED BY THE ANALYSIS DESCRIBED IN SECTION 7.2.2.1 OF THE PHASE II RI REPORT.

- WHERE SYMBOLS FOR MULTIPLE WELLS OVERLAP, THE SYMBOL FOR THE MOST SIGNIFICANT IMPACTS, AS SHOWN IN THE HIERARCHY AT LEFT, IS DISPLAYED ON TOP OF THE OTHER SYMBOLS.

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0 500'

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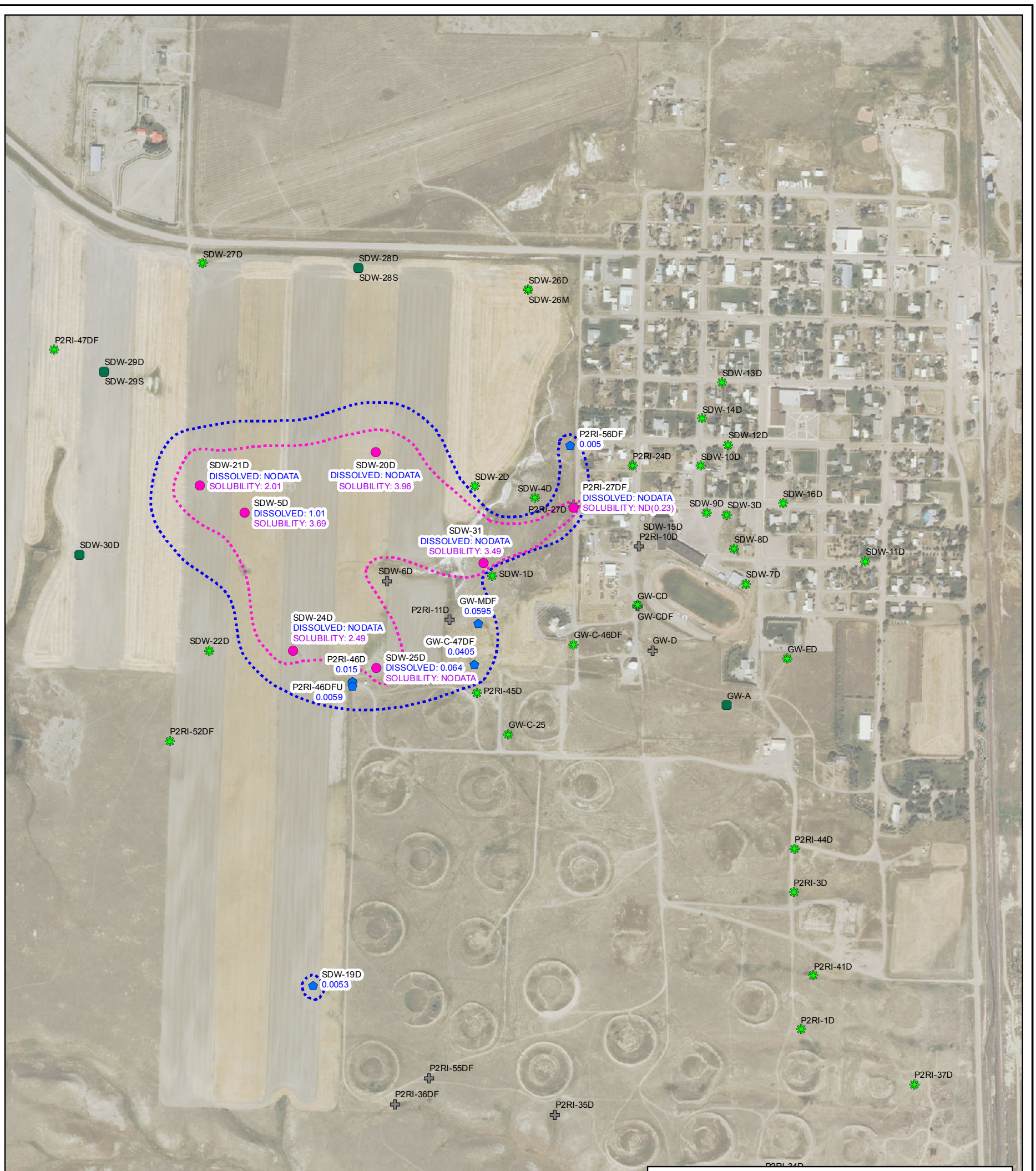
FIGURE 7.2-7

TPH CONCENTRATIONS IN GROUNDWATER WEATHERED SHALE AND ALLUVIAL SEDIMENTS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 500 '	Date: 11/4/13	File: Fig_P2RI_Shallow_TPH.mxd



EXPLANATION

BENZENE IN MONITORING WELLS - COMPETENT SHALE

- CURRENT OR RECENT LNAPL; BENZENE EFFECTIVE SOLUBILITY AND DISSOLVED PHASE CONCENTRATION REPORTED IF AVAILABLE
- DISSOLVED PHASE BENZENE ABOVE STANDARD
- BENZENE DETECTED ABOVE STANDARD IN THE PAST; CURRENTLY BELOW STANDARD
- DISSOLVED PHASE BENZENE BELOW STANDARD
- DRY WELL
- NO DATA
- APPROXIMATE AREA IMPACTED BY LNAPL
- APPROXIMATE CONTOUR OF 0.005 MILLIGRAMS PER LITER BENZENE IN GROUNDWATER

NOTES:

-LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

- VALUES DISPLAYED IN BLUE ARE DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.

- VALUES DISPLAYED IN PURPLE ARE EFFECTIVE SOLUBILITIES OF BENZENE FROM LNAPL SAMPLES.

- VALUES REPORTED IN MILLIGRAMS PER LITER AND SELECTED BY THE ANALYSIS DESCRIBED IN SECTION 7.2.2.1 OF THE PHASE II RI REPORT.

- WHERE SYMBOLS FOR MULTIPLE WELLS OVERLAP, THE SYMBOL FOR THE MOST SIGNIFICANT IMPACTS, AS SHOWN IN THE HIERARCHY AT LEFT, IS DISPLAYED ON TOP OF THE OTHER SYMBOLS.

- LNAPL AND GROUNDWATER IN THE COMPETENT SHALE MOVE IN A COMPLEX PATHWAY DETERMINED BY FRACTURE GEOMETRY. DELINEATION OF IMPACTED AREAS IS APPROXIMATE.

- REVISED 4/23/14 TO INDICATE THAT P2RI-27DF CONTAINS LNAPL AND P2RI-56DF CONTAINS BENZENE ABOVE THE DEQ-7 STANDARD.

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N

0 650 '

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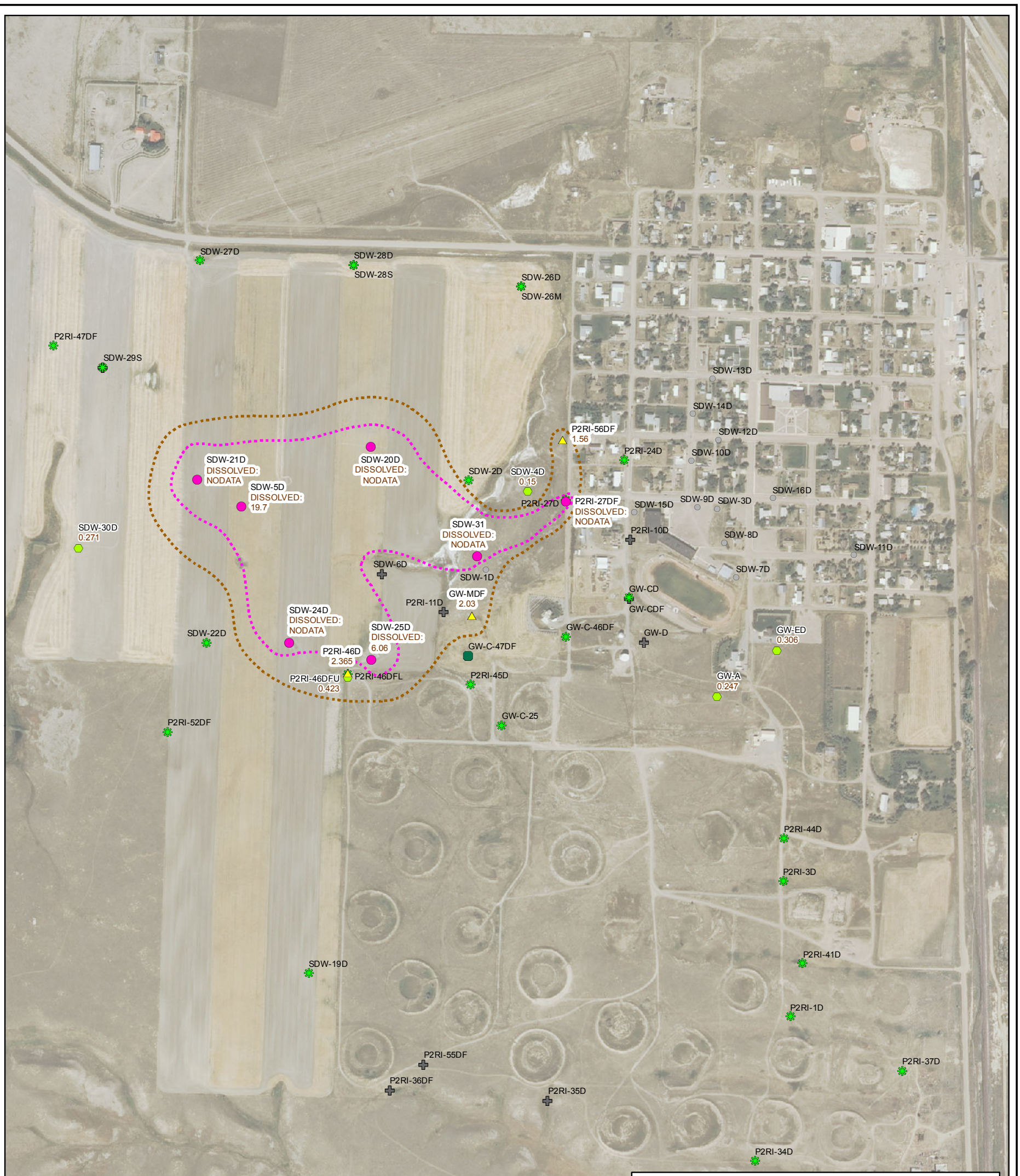
FIGURE 7.2-8

BENZENE CONCENTRATIONS IN GROUNDWATER COMPETENT SHALE

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 650 '	Date: 4/24/14	File: Fig_P2RI_COMP_BENZ.mxd



EXPLANATION

TPH IN MONITORING WELLS - COMPETENT SHALE

- CURRENT OR RECENT LNAPL; DISSOLVED PHASE TPH CONCENTRATION REPORTED IF AVAILABLE
- DISSOLVED PHASE TPH ABOVE STANDARD
- TPH DETECTED ABOVE STANDARD IN THE PAST; CURRENTLY BELOW STANDARD
- TPH DETECTABLE BELOW STANDARD
- DISSOLVED PHASE TPH BELOW STANDARD
- DRY WELL
- NO DATA
- APPROXIMATE AREA IMPACTED BY LNAPL
- APPROXIMATE CONTOUR OF 1 MILLIGRAM PER LITER TPH IN GROUNDWATER

NOTES:

-TPH - TOTAL PURGEABLE HYDROCARBONS

-LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

- VALUES DISPLAYED IN GOLD ARE DISSOLVED PHASE TPH CONCENTRATIONS.

- VALUES REPORTED IN MILLIGRAMS PER LITER AND SELECTED BY THE ANALYSIS DESCRIBED IN SECTION 7.2.2.1 OF THE PHASE II RI REPORT.

- WHERE SYMBOLS FOR MULTIPLE WELLS OVERLAP, THE SYMBOL FOR THE MOST SIGNIFICANT IMPACTS, AS SHOWN IN THE HIERARCHY AT LEFT, IS DISPLAYED ON TOP OF THE OTHER SYMBOLS.

- LNAPL AND GROUNDWATER IN THE COMPETENT SHALE MOVE IN A COMPLEX PATHWAY DETERMINED BY FRACTURE GEOMETRY. DELINEATION OF IMPACTED AREAS IS APPROXIMATE.

- REVISED 4/23/14 TO INDICATE THAT P2RI-27DF CONTAINS LNAPL AND P2RI-56DF CONTAINS BENZENE ABOVE THE DEQ-7 STANDARD.

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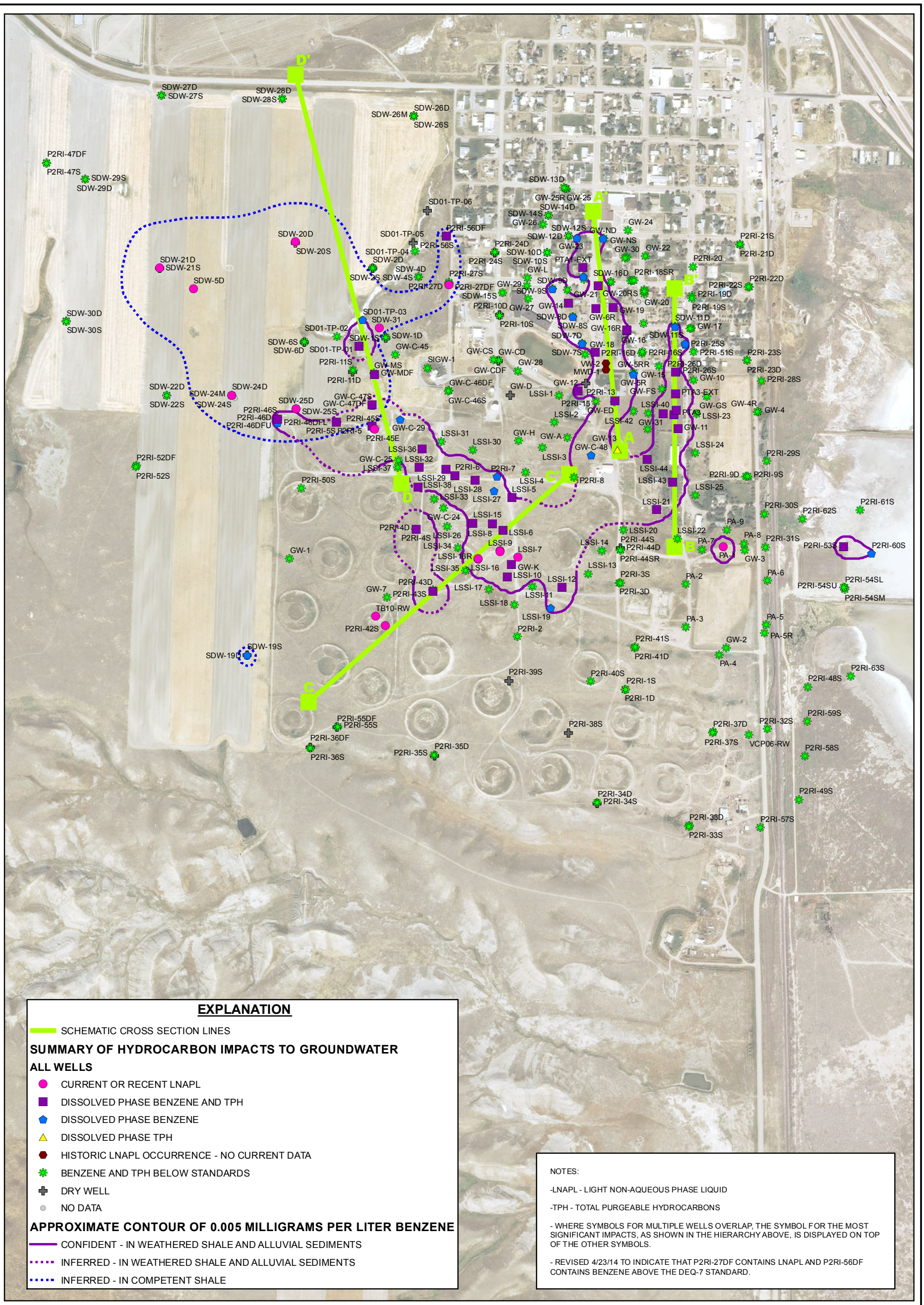
FIGURE 7.2-9

TPH CONCENTRATIONS IN GROUNDWATER COMPETENT SHALE

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 650 '	Date: 4/24/14	File: Fig_P2RI_COMP_TPH.mxd



EXPLANATION

SCHEMATIC CROSS SECTION LINES

SUMMARY OF HYDROCARBON IMPACTS TO GROUNDWATER

ALL WELLS

- CURRENT OR RECENT LNAPL
- DISSOLVED PHASE BENZENE AND TPH
- DISSOLVED PHASE BENZENE
- DISSOLVED PHASE TPH
- HISTORIC LNAPL OCCURRENCE - NO CURRENT DATA
- BENZENE AND TPH BELOW STANDARDS
- DRY WELL
- NO DATA

APPROXIMATE CONTOUR OF 0.005 MILLIGRAMS PER LITER BENZENE

- CONFIDENT - IN WEATHERED SHALE AND ALLUVIAL SEDIMENTS
- INFERRED - IN WEATHERED SHALE AND ALLUVIAL SEDIMENTS
- INFERRED - IN COMPETENT SHALE

NOTES:

-LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID

-TPH - TOTAL PURGEABLE HYDROCARBONS

- WHERE SYMBOLS FOR MULTIPLE WELLS OVERLAP, THE SYMBOL FOR THE MOST SIGNIFICANT IMPACTS, AS SHOWN IN THE HIERARCHY ABOVE, IS DISPLAYED ON TOP OF THE OTHER SYMBOLS.

- REVISED 4/23/14 TO INDICATE THAT P2RI-27DF CONTAINS LNAPL AND P2RI-56DF CONTAINS BENZENE ABOVE THE DEQ-7 STANDARD.

2011 NAIP AERIAL IMAGE

N

0 750 '

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FIGURE 7.2-10

INDEX FOR SCHEMATIC CROSS SECTION LINES

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: TM	Checked By: TF	Scale: 1 " = 750 '	Date: 5/7/14	File: Fig_P2RI_CrossSectIndex.mxd

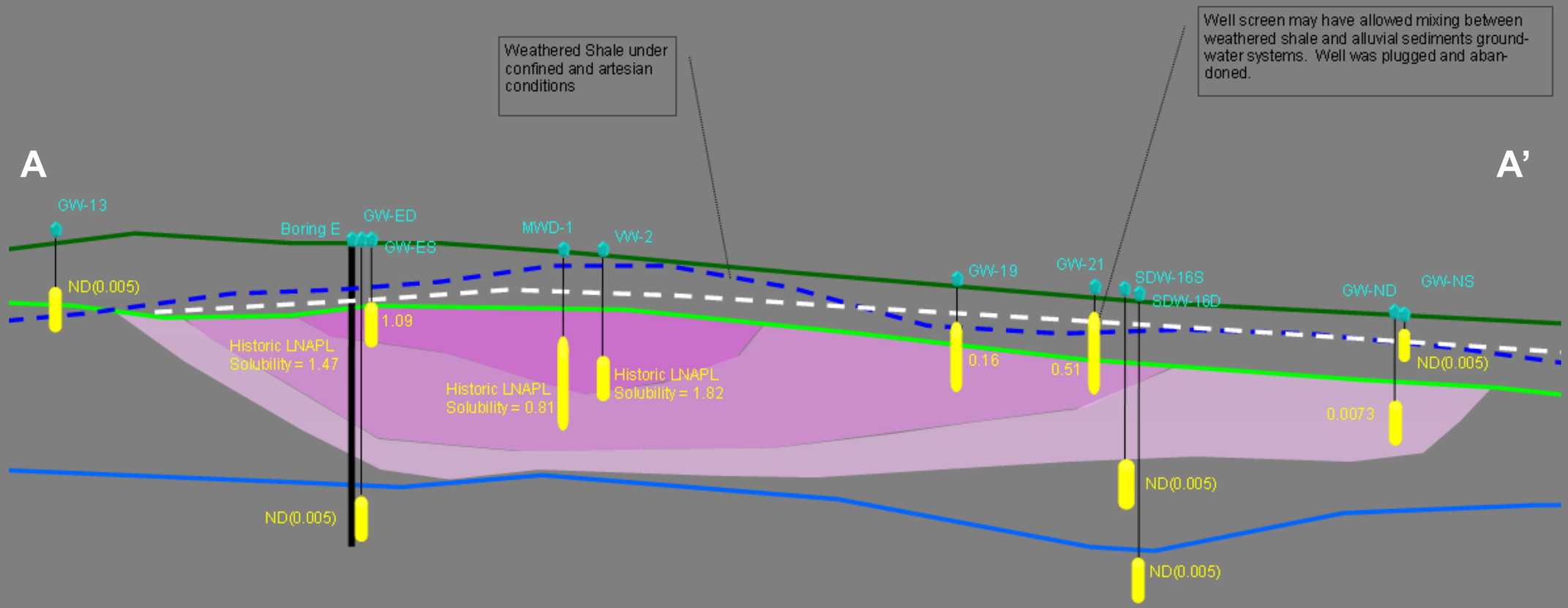

FIGURE 7.2-11. SCHEMATIC CROSS SECTION A-A'
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 8/282012

EXPLANATION

Approximate Benzene Concentration in Groundwater (milligrams per liter)

- 0.005 to 0.1
- 0.1 to 1
- 1 to 2

- March 2012 Potentiometric Surface in Weathered Shale
- March 2012 Potentiometric Surface in Alluvial Sediments
- Ground Surface
- Top of Weathered Shale
- Top of Competent Shale

GW-ES — Monitoring Well Designation

1.09 — Screened interval and benzene concentration (milligrams per liter)

NOTES:
ND - not detected (reporting limit in parentheses)
Scale approximate; 6 times vertical exaggeration

0 100 200 300 HORIZONTAL FEET

B

B’

Apparent advective vertical connectivity between weathered shale and alluvial sediments

Chemical diffusion upward from weathered shale?

Well screen may have allowed mixing between weathered shale and alluvial sediments groundwater systems. Well was plugged and abandoned.

LSSI-22
LSSI-43
GW-11
LSSI-39
GW-31
PTA3
PTA3-EXT
GW-FS
GW-10
P2RI-26S
P2RI-26D
P2RI-51S
P2RI-25D
P2RI-25S
GW-17R
SDW-11S
SDW-11D
P2RI-19D

ND(0.005)
1.09
2.7
2.9
1.3
1.11
ND(0.005)
2.01
ND(0.005)
0.0071
1.35
ND(0.005)
0.20
0.14
ND(0.005)
0.12
ND(0.005)
ND(0.005)

0 125 250 375 500 HORIZONTAL FEET

FIGURE 7.2-12. SCHEMATIC CROSS SECTION B-B’
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 8/282012

EXPLANATION

Approximate Benzene Concentration in Groundwater (milligrams per liter)

- 0.005 to 0.1
- 0.1 to 1
- 1 to 3

- March 2012 Potentiometric Surface in Weathered Shale
- March 2012 Potentiometric Surface in Alluvial Sediments
- Ground Surface
- Top of Weathered Shale
- Top of Competent Shale

GW-ES — Monitoring Well Designation

1.09 — Screened interval and benzene concentration (milligrams per liter)

NOTES:
ND - not detected (reporting limit in parentheses)
Scale approximate; 6 times vertical exaggeration

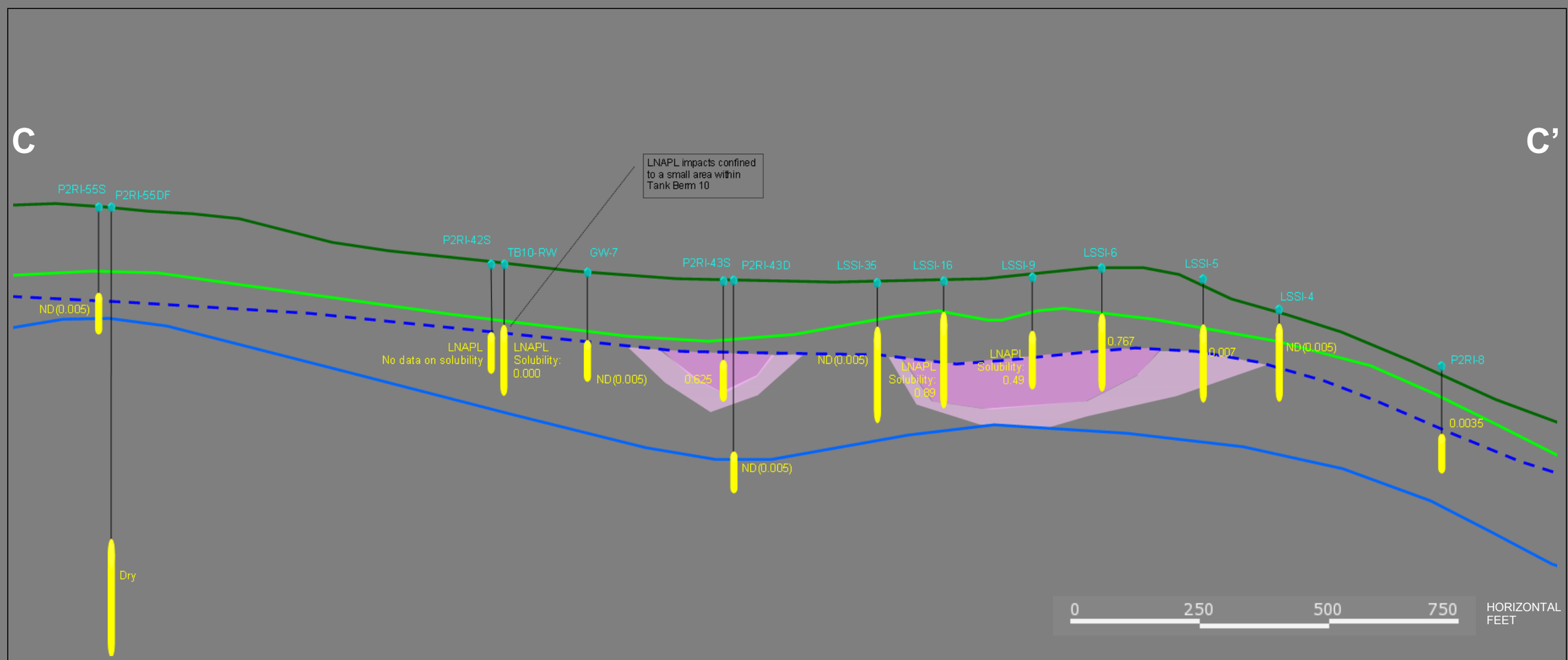

FIGURE 7.2-13. SCHEMATIC CROSS SECTION C-C'
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 8/282012

EXPLANATION

Approximate Benzene Concentration in Groundwater (milligrams per liter)

- 0.005 to 0.1
- 0.1 to 1

- March 2012 Potentiometric Surface in Weathered Shale
- Ground Surface
- Top of Weathered Shale
- Top of Competent Shale

GW-ES — Monitoring Well Designation

1.09 — Screened interval and benzene concentration (milligrams per liter)

NOTES:
ND - not detected (reporting limit in parentheses)
Scale approximate; 6 times vertical exaggeration

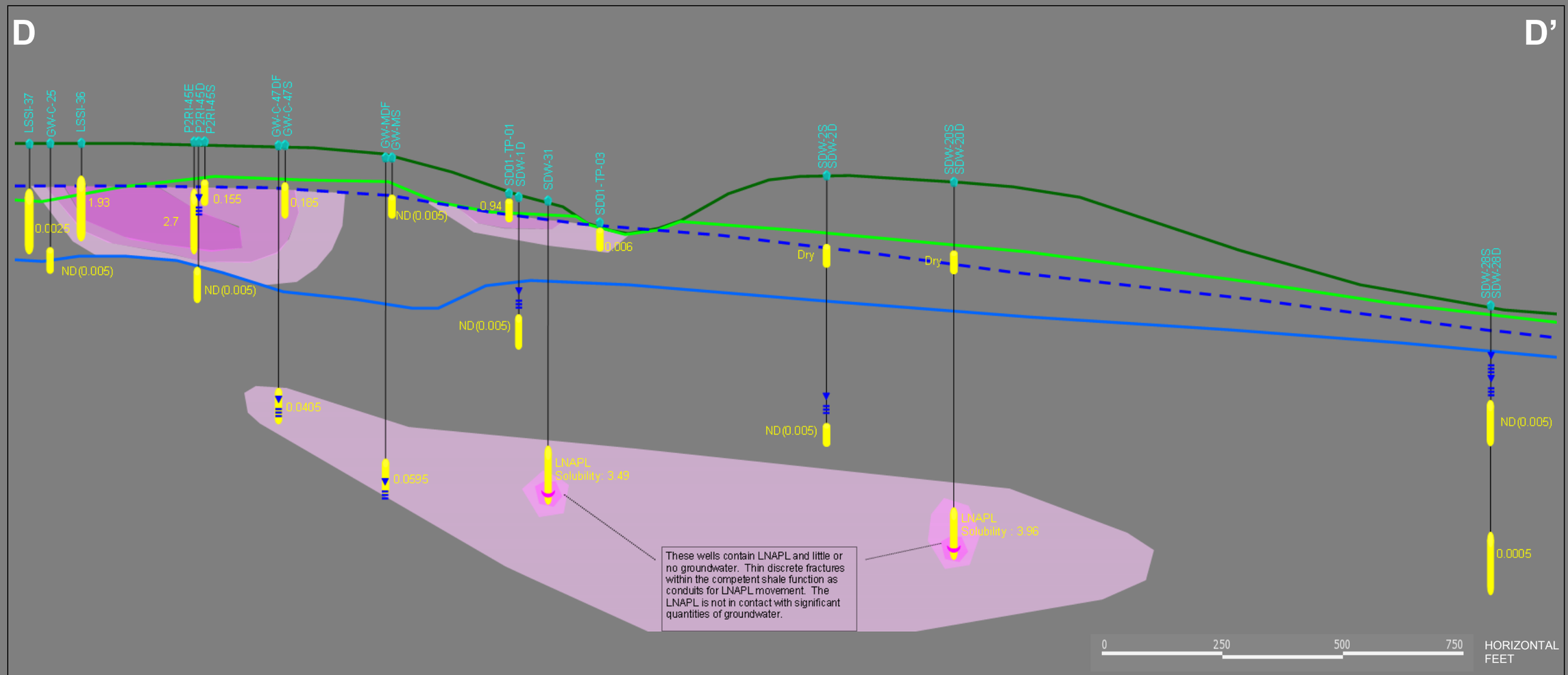

FIGURE 7.2-14. SCHEMATIC CROSS SECTION D-D'
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

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Date: 9/6/2012

EXPLANATION

Approximate Benzene Concentration in Groundwater (milligrams per liter)

- 0.005 to 0.1
- 0.1 to 1
- 1 to 3

- March 2012 Potentiometric Surface in Weathered Shale
- Ground Surface
- Top of Weathered Shale
- Top of Competent Shale

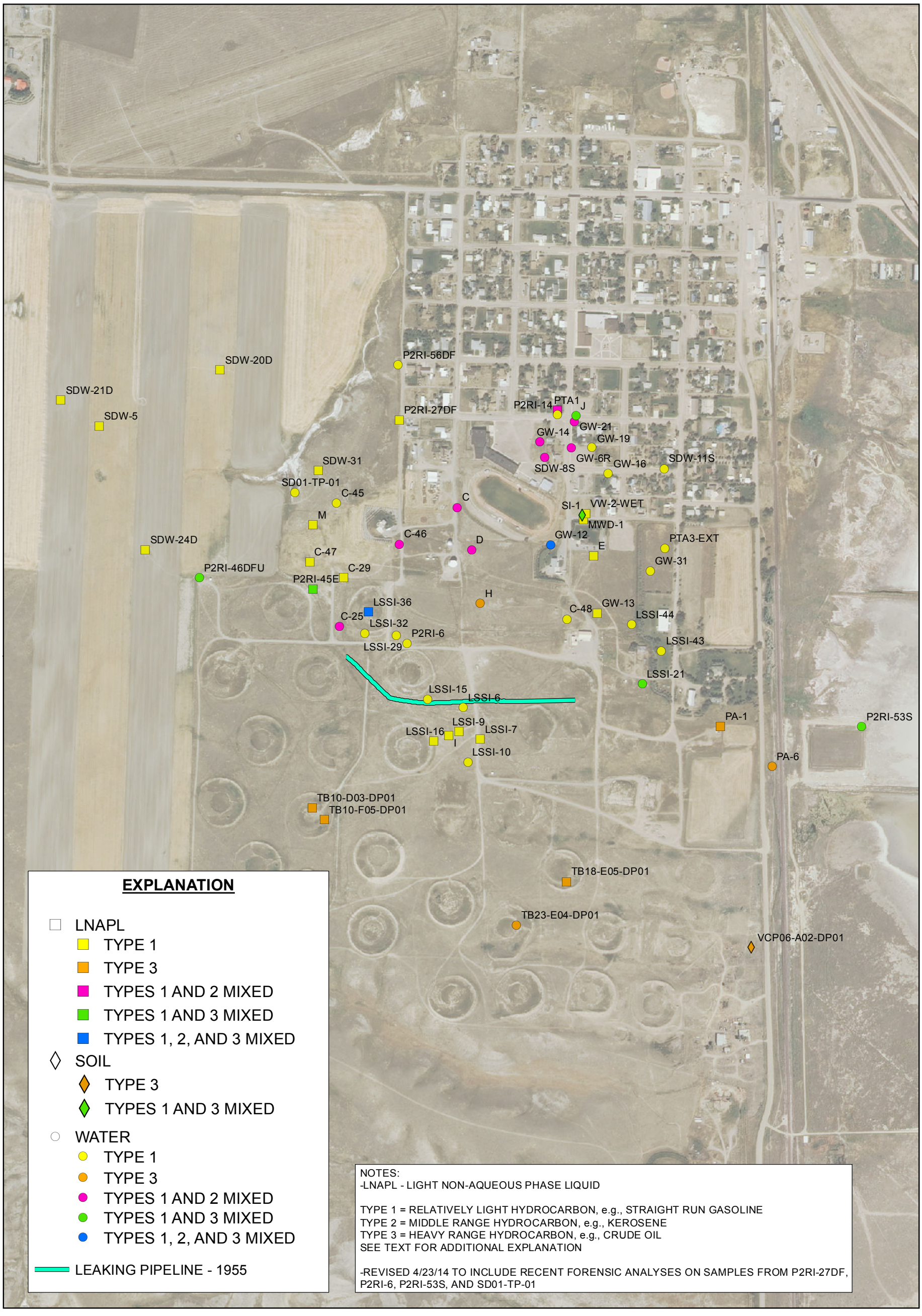
SDW-31 — Monitoring Well Designation

March 2012 LNAPL elevation (wells screened in competent shale only)

March 2012 groundwater elevation (wells screened in competent shale only)

1.09 — Screened interval and benzene concentration (milligrams per liter)

NOTES:
ND - not detected (reporting limit in parentheses)
Scale approximate; 6 times vertical exaggeration



2011 NAIP AERIAL IMAGE

N

0 650'

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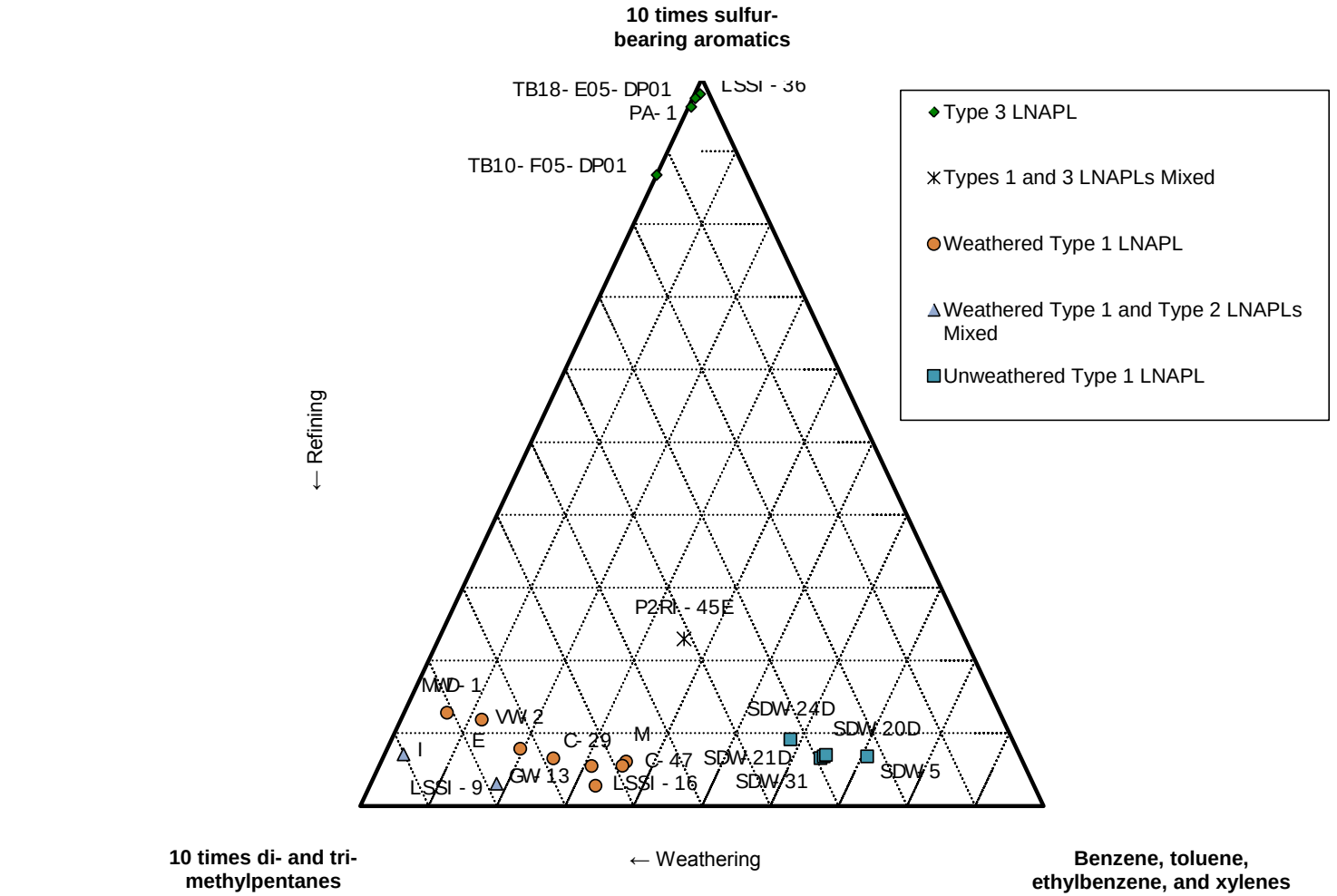
FIGURE 7.2-15

LNAPL AND DISSOLVED PHASE HYDROCARBON CHARACTERIZATION AND DISTRIBUTION

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: TM	Checked By: TF	Scale: 1" = 650'	Date: 4/23/2014	File: Fig_P2RI_Forensics.mxd

FIGURE 7.2-16. LNAPL KEY COMPONENTS TERNARY DIAGRAM
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



Note:
LNAPL - Light non-aqueous phase liquid

EXPLANATION

ORGANIC CONSTITUENT EXCEEDANCE LOCATION TYPE

- SURFACE SOIL (0 TO 2 FT BGS)
- SUBSURFACE SOIL (2 TO 10 FT BGS)
- SUBSURFACE SOIL (GREATER THAN 10 FT BGS)
- TANK BERM
- PROPERTY BOUNDARY

N

0 600'

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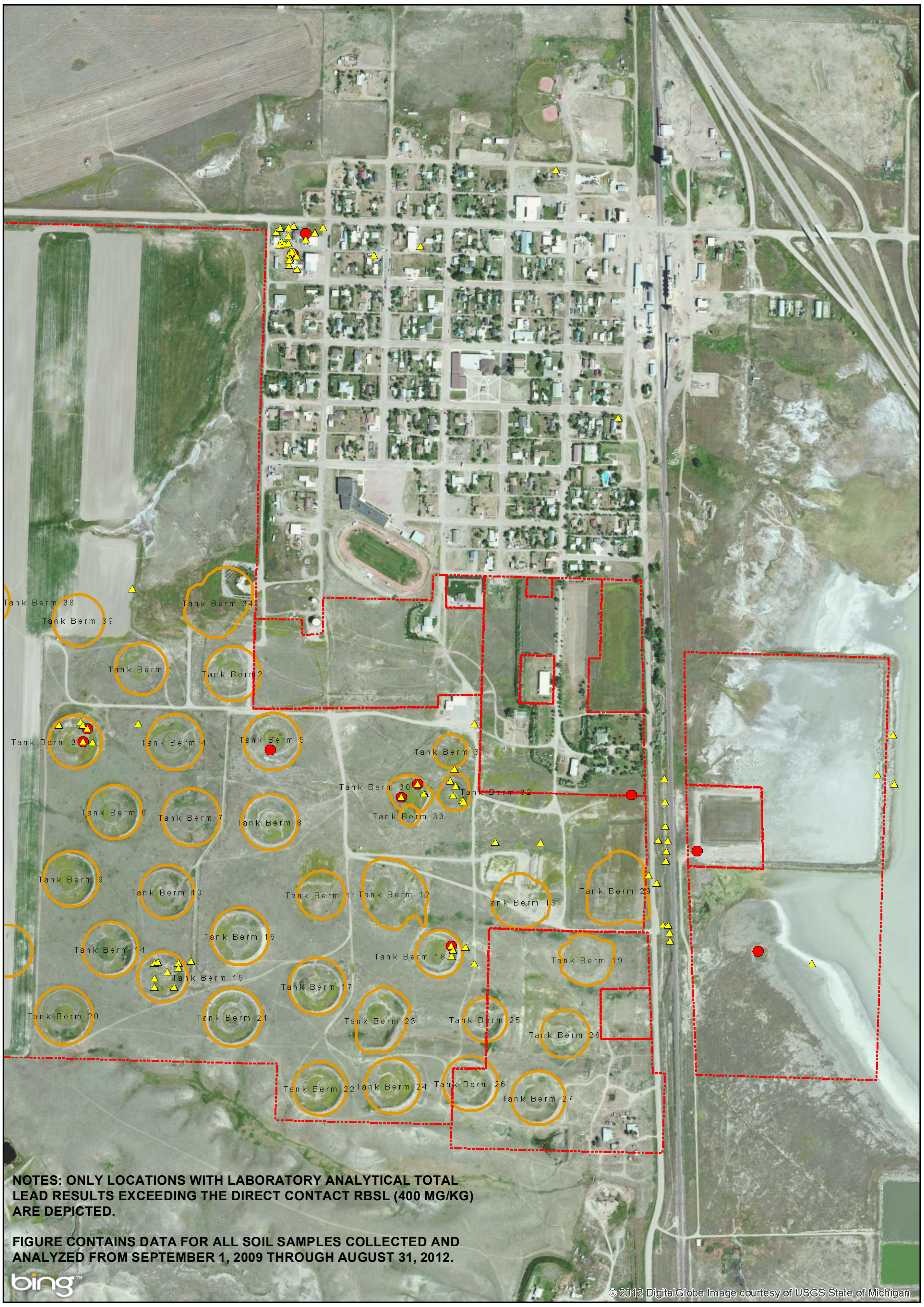
FIGURE 7.5-1A

ORGANIC CONSTITUENT RBSL EXCEEDANCE LOCATIONS SURFACE AND SUBSURFACE SOIL

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: JH	Checked By: PH	Scale: 1" = 600'	Date: 11/7/13	File: 12202012_DirectExposureExceed.mxd



EXPLANATION

LEAD EXCEEDANCE LOCATION TYPE

- SURFACE SOIL (0 TO 2 FT BGS)
- SUBSURFACE SOIL (2 TO 10 FT BGS)
- TANK BERM
- PROPERTY BOUNDARY

N

0 600'

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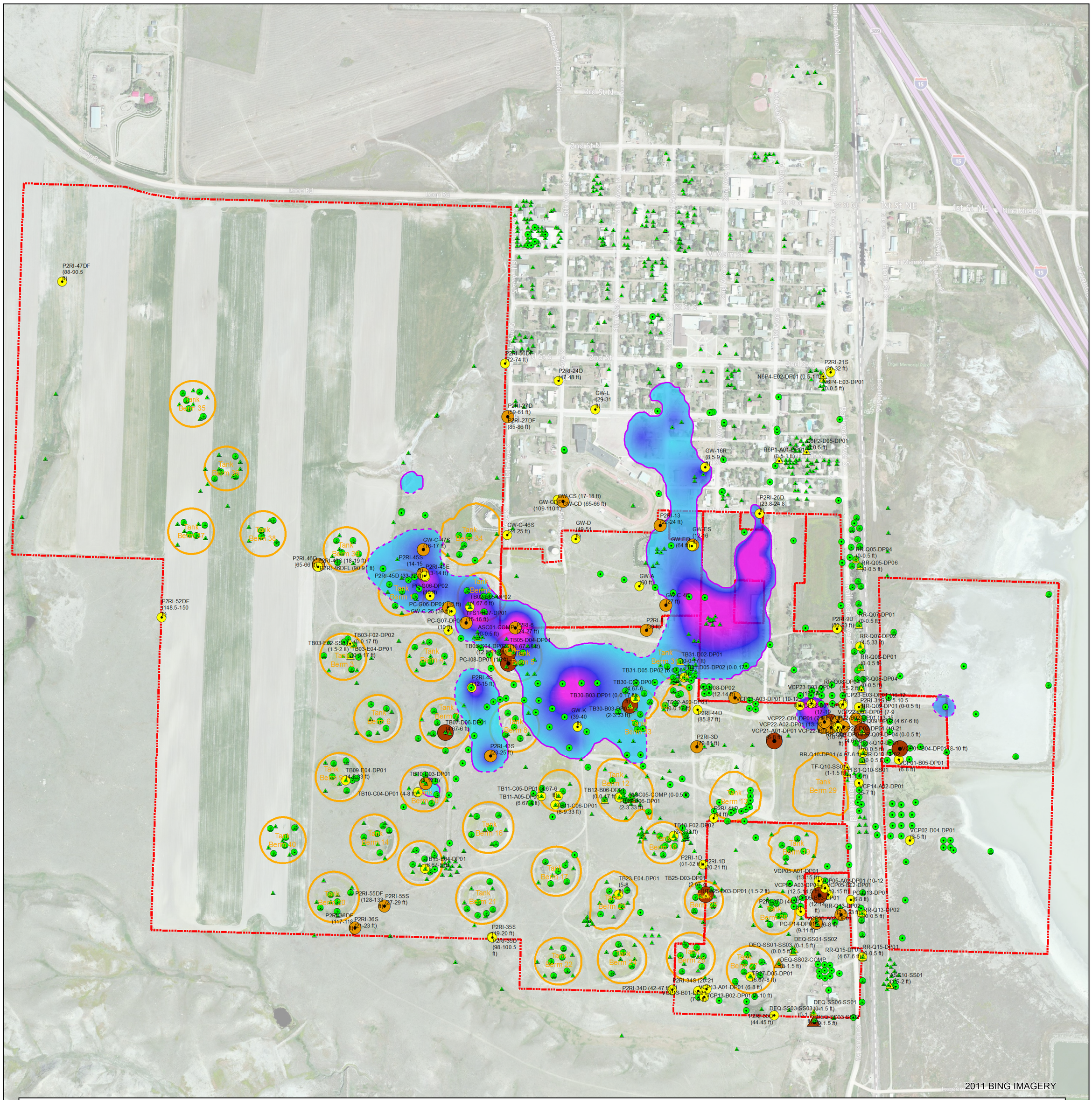
FIGURE 7.5-1B

**INORGANIC CONSTITUENT (LEAD)
RBSL EXCEEDANCE LOCATIONS
SURFACE AND SUBSURFACE SOIL**

**PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA**

Drawn By: JH	Checked By: PH	Scale: 1" = 600'	Date: 11/7/13	File: 12202012_DirectContactExceed_Lead.mxd



EXPLANATION

SURFACE SOIL CARCINOGEN MTGW SL EXCEEDANCES

- 0 CARCINOGEN MTGW EXCEEDANCES
- 1 CARCINOGEN MTGW EXCEEDANCE
- 2 CARCINOGEN MTGW EXCEEDANCES
- 3 CARCINOGEN MTGW EXCEEDANCES

SUBSURFACE SOIL CARCINOGEN MTGW SL EXCEEDANCES

- 0 CARCINOGEN MTGW EXCEEDANCES
- 1 CARCINOGEN MTGW EXCEEDANCE
- 2 CARCINOGEN MTGW EXCEEDANCES
- 3 CARCINOGEN MTGW EXCEEDANCES

APPROXIMATE CONTOUR OF 1 mg/L TPH

- CONFIDENT
- INFERRED

TPH VALUES

High : 21

Low : 0

- PROPERTY BOUNDARY 2012
- TANK BERM

N

0 475 950'

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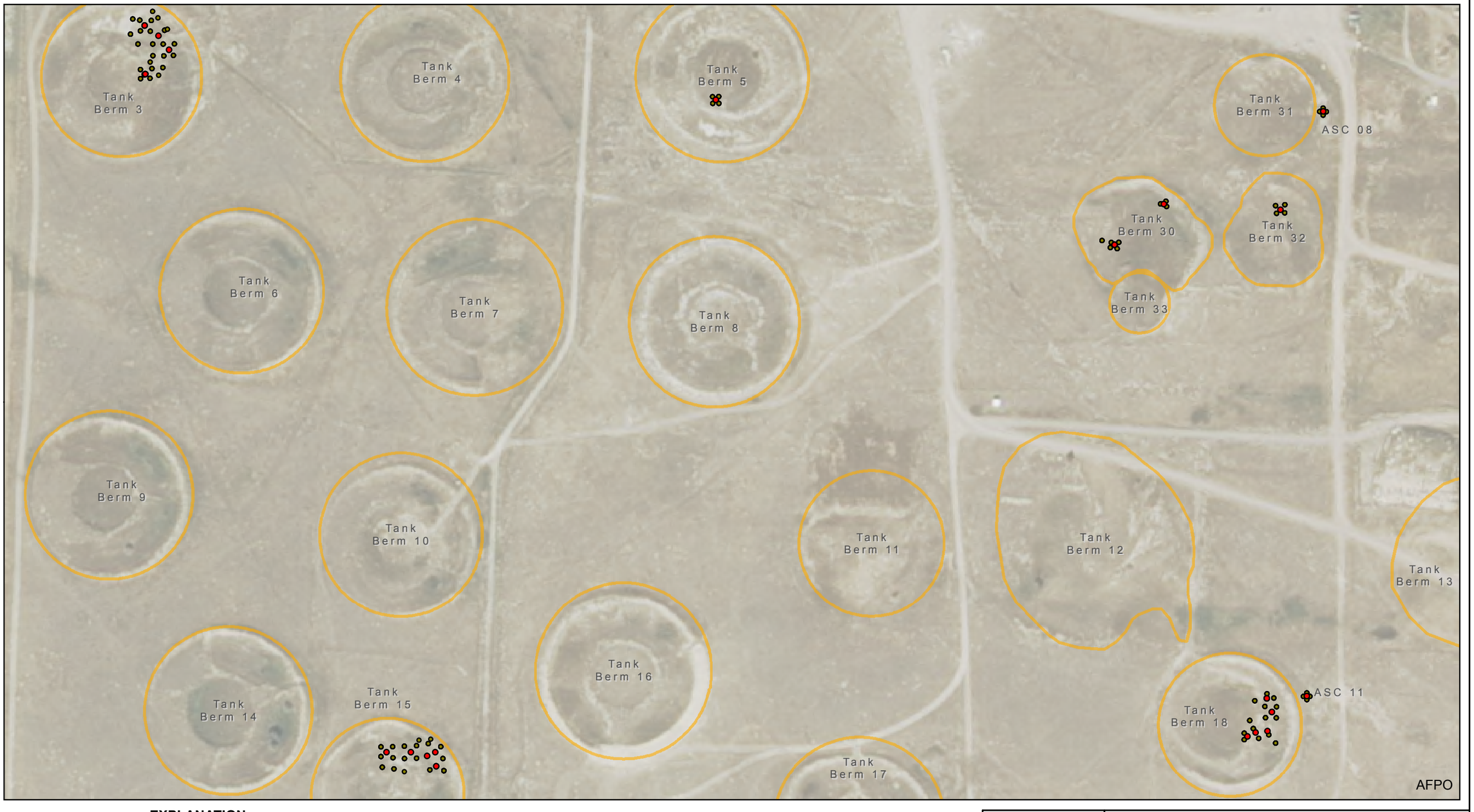
FIGURE 7.5-2

MIGRATION TO GROUNDWATER SCREENING LEVEL EXCEEDANCES (CARCINOGENS) IN SOIL AND GROUNDWATER TPH PLUME

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: JH	Checked By: PH	Scale: 1" = 475'	Date: 11/4/13	File: 12292012_Carcinogens_MTGW_Soil-vs-GWTPH_ARCH-C.mxd



EXPLANATION

- ELEVATED LEAD CONCENTRATION
- OCTOBER/NOVEMBER 2012 SAMPLE LOCATIONS
- TANK BERM

N

0 200'

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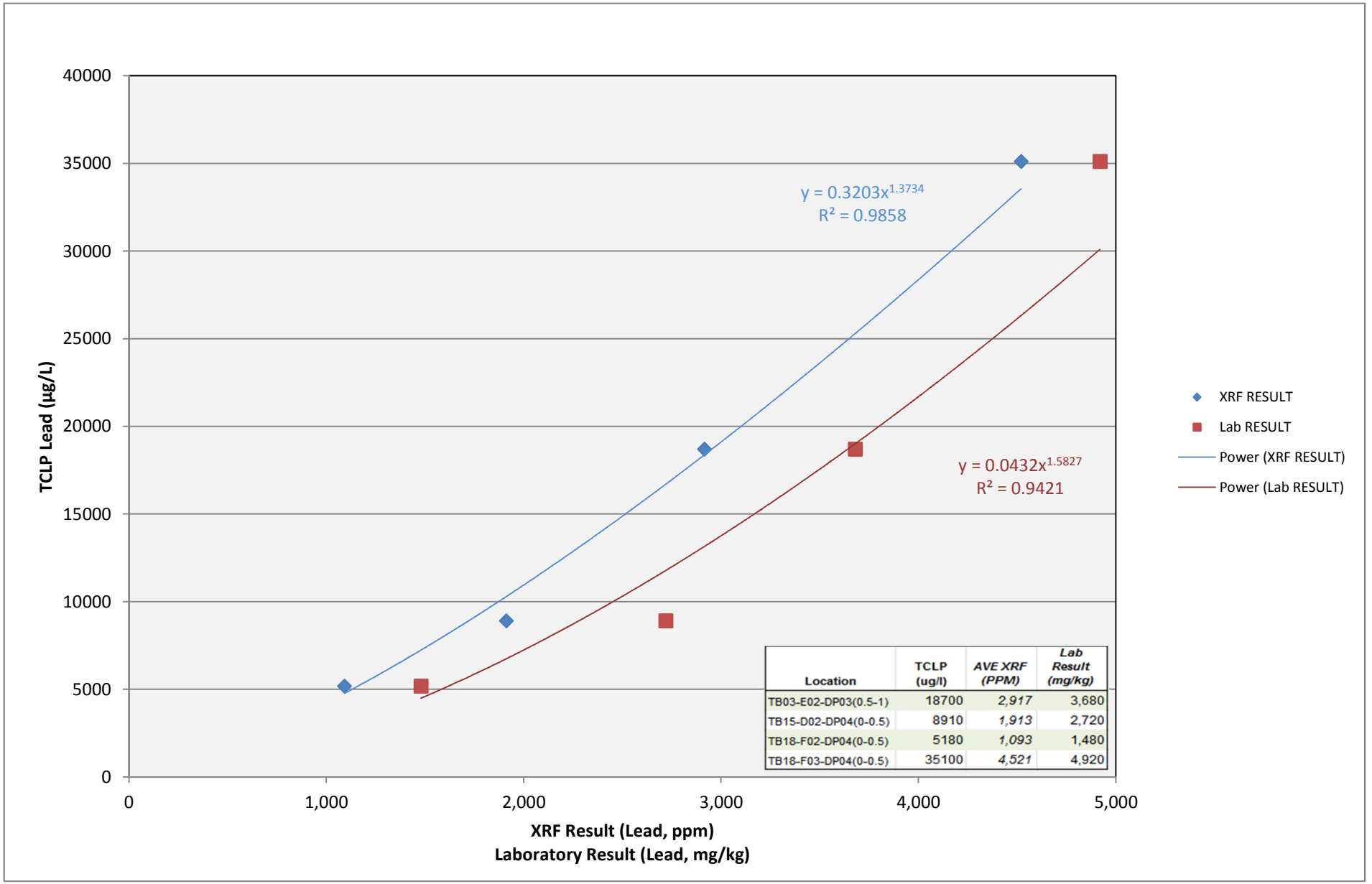
FIGURE 8.1-1

DELINEATION OF LEAD IMPACTED SOILS IN TANK BERMS

PHASE II REMEDIAL INVESTIGATION REPORT FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA

Drawn By: JK	Checked By: PH	Scale: 1" = 200'	Date: 11/6/13	File: Sunburst_PhaseII_FIG8.1-1.mxd

FIGURE 8.1-2. LABORATORY XRF LEAD RESULTS VERSUS TCLP LEAD RESULTS
PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



Location	TCLP (ug/l)	AVE XRF (PPM)	Lab Result (mg/kg)
TB03-E02-DP03(0.5-1)	18700	2,917	3,680
TB15-D02-DP04(0-0.5)	8910	1,913	2,720
TB18-F02-DP04(0-0.5)	5180	1,093	1,480
TB18-F03-DP04(0-0.5)	35100	4,521	4,920

EXPLANATION

- SEDIMENT SAMPLE LOCATION
- GROUNDWATER SAMPLE LOCATION
- SURFACE WATER SAMPLE LOCATION
- SURFACE SOIL SAMPLE LOCATION
- SUBSURFACE SOIL SAMPLE LOCATION
- SUPPLEMENTAL INVESTIGATION NEAR-SLAB SOIL GAS WELL
- VAPOR SAMPLE LOCATION
- CHEVRON PROPERTY BOUNDARY

N

0 1,000 '

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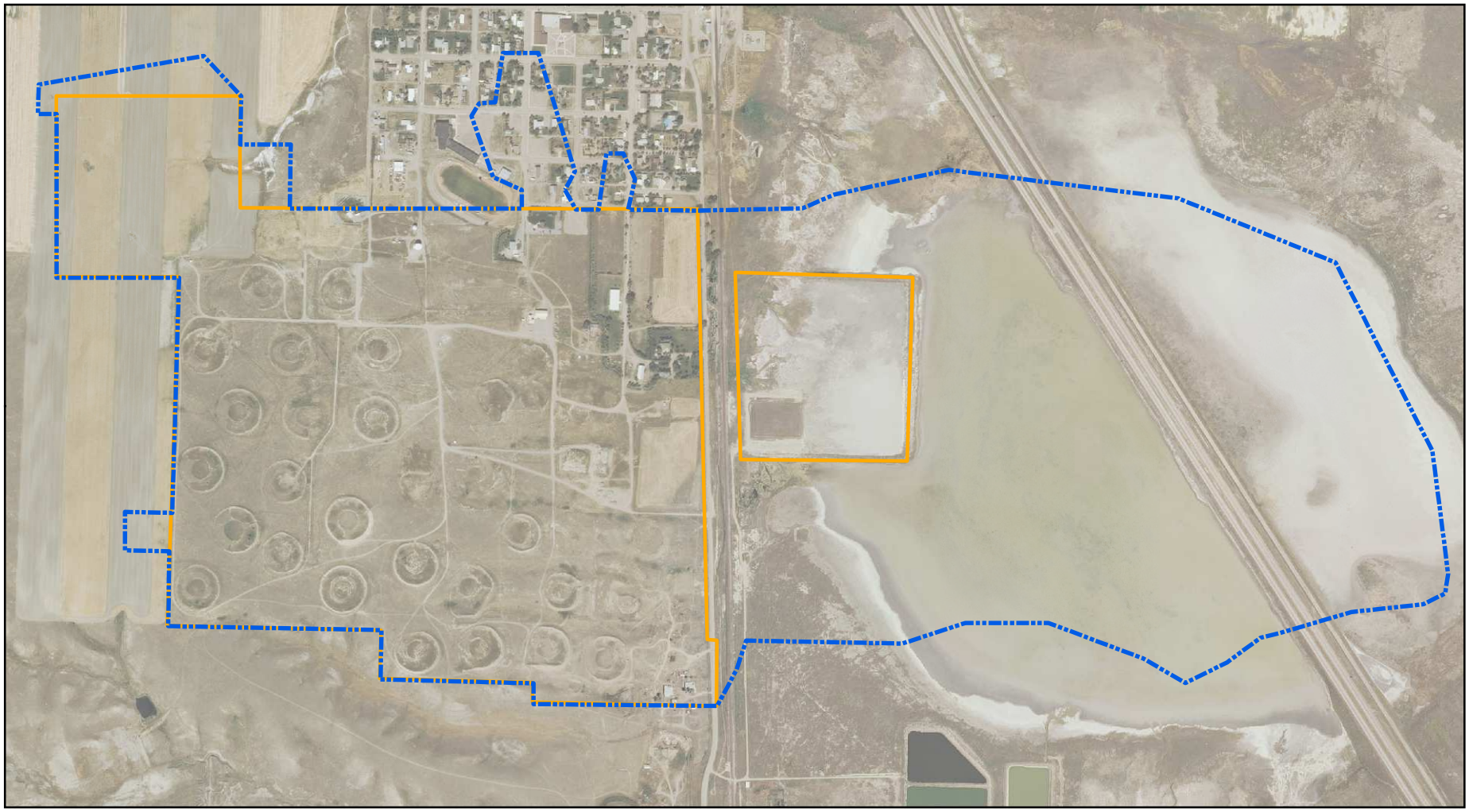
FIGURE 9.1-1

SAMPLE LOCATIONS
ALL MEDIA

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JH	Checked By: PH	Scale: 1" = 1000'	Date: 6/18/13	File: 12182012_AllMatricies.mxd



EXPLANATION

PROPOSED FACILITY BOUNDARY

FORMER REFINERY BOUNDARY

N

0 1,100'

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FIGURE 9.1-2

PROPOSED FACILITY BOUNDARY

PHASE II REMEDIAL INVESTIGATION REPORT
FORMER TEXACO SUNBURST WORKS REFINERY
SUNBURST, MONTANA

Drawn By: JH	Checked By: PH	Scale: 1" = 1100'	Date: 10/30/13	File: FacilityBoundary.mxd

APPENDIX 1

(PLEASE SEE ATTACHED USB FLASH DRIVE)

1-A. MDEQ CORRESPONDENCE

1-B. FACILITY OPERATING & PRIOR INVESTIGATIONS HISTORY

1-C. DETERMINATION OF GROUNDWATER CLASSIFICATION

1-D. JURISDICTIONAL DETERMINATION REQUEST

APPENDIX 2

(PLEASE SEE ATTACHED USB FLASH DRIVE)

2-A. MDEQ CORRESPONDENCE

2-B. DATA VALIDATION METHODS

2-C. QUALITY ASSURANCE PROJECT PLAN

2-D. BACKGROUND EVALUATION, METALS CONCENTRATIONS IN SOIL

APPENDIX 3

(PLEASE SEE ATTACHED USB FLASH DRIVE)

3-A. SOIL ANALYTICAL RESULTS TABLES

3-B. SOIL SAMPLING FIELDS FORMS

3-C. FIELD EQUIPMENT CALIBRATION FORMS

3-D. SOIL LABORATORY ANALYTICAL REPORTS

3-E. SOIL DATA VALIDATION REPORTS

3-F. SOIL DATA VALIDATION RESULTS SUMMARY

3-G. TOWN OF SUNBURST – SOIL AND MATERIALS STOCKPILE

3-H. RESIDENTIAL SOIL INVESTIGATION QUESTIONNAIRES

APPENDIX 4

(PLEASE SEE ATTACHED USB FLASH DRIVE)

4-A. BORING LOGS AND WELL COMPLETION DIAGRAMS

4-B. MONITORING WELL DEVELOPMENT FORMS

4-C. SAMPLING FIELD FORMS

4-D. FIELD EQUIPMENT CALIBRATION FORMS

4-E. MONITORING WELL PLUG AND ABANDONMENT COMPLETION FORMS

4-F. LABORATORY ANALYTICAL REPORTS

4-G. DATA VALIDATION REPORTS

4-H. DATA VALIDATION RESULTS SUMMARY

4-I. THIRD AND FOURTH QUARTER 2012 GROUNDWATER SAMPLING

4-J. GROUNDWATER SAMPLING PROGRAM MODIFICATION

APPENDIX 5

(PLEASE SEE ATTACHED USB FLASH DRIVE)

5-A. INSPECTION AND SAMPLING FIELD FORMS

5-B. FIELD EQUIPMENT CALIBRATION FORMS

5-C. LABORATORY ANALYTICAL REPORTS

5-D. DATA VALIDATION REPORTS

5-E. DATA VALIDATION RESULTS SUMMARY

5-F. PHOTO LOGS

APPENDIX 6

(PLEASE SEE ATTACHED USB FLASH DRIVE)

6-A.	**FIELD FORMS**
6-B.	**EQUIPMENT CALIBRATION FORMS**
6-C.	**NEWFIELDS LABORATORY REPORT, S139 SUMP**
6-D.	**LABORATORY ANALYTICAL REPORTS**
6-E.	**DATA VALIDATION REPORTS**
6-F.	**COMPILED DATA VALIDATION RESULTS, RESIDENTIAL SUMP INVESTIGATION**
6-G.	**VAPOR INTRUSION INVESTIGATION REPORTS (MAY 2008, JULY 2009, AND MAY 2010)**
6-H.	**SUSPECT DUMP AREA INVESTIGATION, MBOG EXPLORATION WELL RECORDS**
6-1.	**MDEQ COMMUNICATION, WET ELECTROMAGNETIC SURVEY, FIGURE, AND PHOTOGRAPHS**
6-J.	**NW TANK FARM AREA – HISTORICAL PIPELINE INFORMATION, FIGURES, AND PHOTOGRAPHS**
6-K.	**FORMER LAGOON AREA TANK / PIPING – MDEQ COMMUNICATION, FIGURE, AND MAPS**

APPENDIX 7

(PLEASE SEE ATTACHED USB FLASH DRIVE)

APPENDIX 8

(PLEASE SEE ATTACHED USB FLASH DRIVE)

8-A. CORRESPONDENCE

8-B. RESIDENTIAL SOIL INTERIM ACTIONS REPORT

8-C. NITRATE APPLICATION REPORT

8-D. BACKGROUND CONCENTRATIONS IN SURFACE AND SEDIMENT