Delta Environmental Consultants, Inc.

CONOCOPHILLIPS COMPANY
REMEDIATION SYSTEM STATUS REPORT

September 7, 2004

Site No.: 255353 Site Address: 600 Westlake Avenue N., Seattle, Washington
ConocoPhillips Site Manager: Kipp Eckert
Consultant/Contact Person: Delta Environmental Consultants, Inc. – Eric Larsen
Primary Agency/Regulatory ID No.: **Washington DOE Northwest Region**

WORK PERFORMED THIS QUARTER [Second - 2004]

- Monthly operation and maintenance (O&M) of the remediation system. The remediation system consists of an air sparge (AS) unit operating at 15 AS wells within a sparge trench, a deep air sparge (DAS) unit operating at four DAS wells, and a vapor extraction (VE) unit to capture sparge vapors from three capture trenches.

WORK PROPOSED FOR NEXT QUARTER [Third - 2004]

- Continue monthly O&M of the remediation system.

VE SUMMARY

Extraction Equipment:	Rotron EN6F5L VE blower	
Offgas Treatment Equipment:	H2Oil 55-gallon moisture separator; Two 1,800-pound activated carbon units	
Permits for Discharge:	PSCAA No. 4397 (air)	(NPDES, POTW, etc.)
Start-up Date:	8/20/03	
Reporting Period:	4/01/04 - 6/30/04	
Days in Operation During Period:	91	(days)
Total Days in Operation Since Start-Up:	305	(days)
Percent Operating Time During Period:	100%	(%)
System Alarms and Shutdowns:	None	
Trenches Extracted During Period:	VE-01, VE-02, VE-03	
Average Influent Vacuum:	3.5	(inches H2O)
Average Vapor Influent Flow Rate:	217 (estimated based on blower curve)	(SCFM)
Maximum Vapor Influent Concentration for Period (PID):	1.3	(ppmv)
Maximum Vapor Effluent Concentration for Period (PID):	0	(ppmv)
Total Hydrocarbon Removal for Period:	15.2	(lbs)
Cumulative Hydrocarbon Removal to Date:	632.1 (since 8/20/03 startup)	(lbs)
Analytical Results of TPH Concentration in Offgas Emission Sample:	Not Sampled	(ppmv)

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AS SUMMARY

Sparging Equipment:	Sutortbilt air sparge blower	
Start-up Date:	8/20/03	
Reporting Period:	4/01/04 - 6/30/04	
Days in Operation During Period:	91	(days)
Total Days in Operation Since Start-Up:	305	(days)
Percent Operating Time During Period:	100%	(%)
Number of Wells On-line:	15 AS Wells (AS-1 through AS-15)	
Average System Injection Pressure:	4.6	(psig)
Average System Flow Rate:	9.2	(SCFM)

DAS SUMMARY

Sparging Equipment:	Four (4) GAST Compressors	
Start-up Date:	8/20/03	
Reporting Period:	4/01/04 - 6/30/04	
Days in Operation During Period:	0	(days)
Total Days in Operation Since Start-Up:	0	(days)
Percent Operating Time During Period:	0%	(%)
Number of Wells On-line:	4 DAS Wells (DAS-2 through DAS-5)	
Average System Injection Pressure:	0	(psig)
Average System Flow Rate:	0	(SCFM)

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DISCUSSION

System Operation and Maintenance

Delta conducted three site visits on April 28, May 27, and June 22, 2004 to perform operation and maintenance (O&M) of the remediation system during the second quarter of 2004. The air-sparge (AS) and vapor extraction (VE) units operated continuously over the reporting period. The deep air sparge (DAS) unit was shut down on March 30, 2004 due to mechanical failure of the deep sparge compressors and did not operate during second quarter of 2004. Delta obtained a single compressor (Gast Model 6066) to replace the four DAS compressors. Installation of the new sparge compressor is scheduled for late September. Operation of the DAS unit will resume following installation of the new compressor.

A summary of VE unit operation parameters is presented in Table 1. Operation summaries of the AS and DAS units are presented in Tables 2 and 3, respectively.

Hydrocarbon Removal and Vapor Emissions

During this reporting period, the VE unit effectively removed hydrocarbons from the site at an average rate of 0.04 pounds per day (3.8 pounds over the second quarter of 2004). An estimated total of 636 pounds of hydrocarbons have been removed from the subsurface by vapor extraction since startup of the current remediation system. Hydrocarbon concentrations in vapor emissions were below the limits of the PSCAA permit based on monthly field monitoring conducted during site visits. A summary of the estimated hydrocarbons removed by the VE unit is included in Table 1.

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LIMITATIONS

The services described in this report were performed in accordance with generally accepted professional consulting principles and practices. No other warranty, either express or implied, is made. These services were performed in accordance with terms established with our client. This report is solely for the use of our client and reliance on any part of this report by a third party is at such party's sole risk.

Delta appreciates the opportunity to provide environmental services for ConocoPhillips Company. Please call if you have any questions regarding the contents of this report.

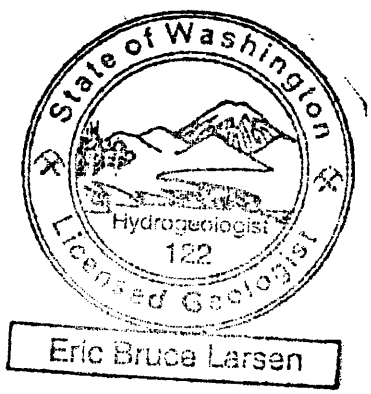
Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Jena Seeds

for Eric Buckler
Project Engineer

Eric Larsen, L.H.G.
Senior Geologist



ATTACHMENTS

Table 1 – VE Unit and Vapor Treatment Operation Summary
Table 2 – Air Sparge Unit Operational Summary
Table 3 – Deep Air Sparge Unit Operational Summary
Figure 1 – Remedial System Site Map

cc: LUST Coordinator, WA State Dept. of Ecology – Northwest Regional Office, Bellevue, WA 98008

TABLE 1
VE UNIT AND VAPOR TREATMENT OPERATION SUMMARY
ConocoPhillips Site No. 255353
600 Westlake Avenue North
Seattle, Washington

Date	Operational Time Since Last Event (days)	Power Reading (KWH)	Vapor Extraction Vacuum (inches H2O)	Average Flowrate [1] (SCFM)	Influent Petroleum Hydrocarbon Concentration [2] (ppm)	Petroleum Hydrocarbon Concentration Between Carbons [3] (ppm)	Emission Petroleum Hydrocarbon Concentration [4] (ppm)	Estimated Petroleum Hydrocarbons Removed During Operating Period [5] (pounds)
01/29/04	45 [6]	NM	3.0	218	1.2	0.0	0.0	4.7
02/28/04	30	32,432	3.0	218	1.2	0.0	0.0	3.1
03/30/04	31	35,592	3.0	218	2.7	0.2	0.0	7.3
04/28/04	29	38,516	3.5	217	0.1	0.1	0.1	0.3
05/27/04	29	41,465	3.5	217	1.3	0.1	0.1	3.3
06/22/04	26	44,045	3.5	217	0.1	0.1	0.1	0.2
Total To Date	**297** [7]							**635.9** [8]
Total for 2nd Qtr 2004	84							3.8

Notes:
KWH = kilowatt-hours
SCFM = standard cubic feet per minute
ppm = parts per million
NM = not measured
[1] Flowrate based on blower vacuum/flow rate curve.
[2] Influent petroleum hydrocarbon concentrations based on field measurements using a photoionization detector (PID).
[3] Concentrations between carbon units based on field measurements using a PID.
[4] Effluent concentrations based on field measurements using a PID.
[5] Hydrocarbons removed during each operating period estimated using influent concentration, average flowrate, and operational time period.
[6] Operation and maintenance of the remedial system was performed on 12/15/03 by the previous consultant. Delta assumed operation and maintenance of the system during January 2004.
[7] Total operational time to date includes 107.1 days operated by previous consultant, from system startup on 8/20/03 through 12/15/03.
[8] Total estimated petroleum hydrocarbons removed to date includes 616.9 pounds reportedly removed by previous consultant, from system startup on 8/20/04 through 12/15/03.

TABLE 2
AIR SPARGE UNIT OPERATIONAL SUMMARY
ConocoPhillips Site No. 255353
600 Westlake Avenue North
Seattle, Washington

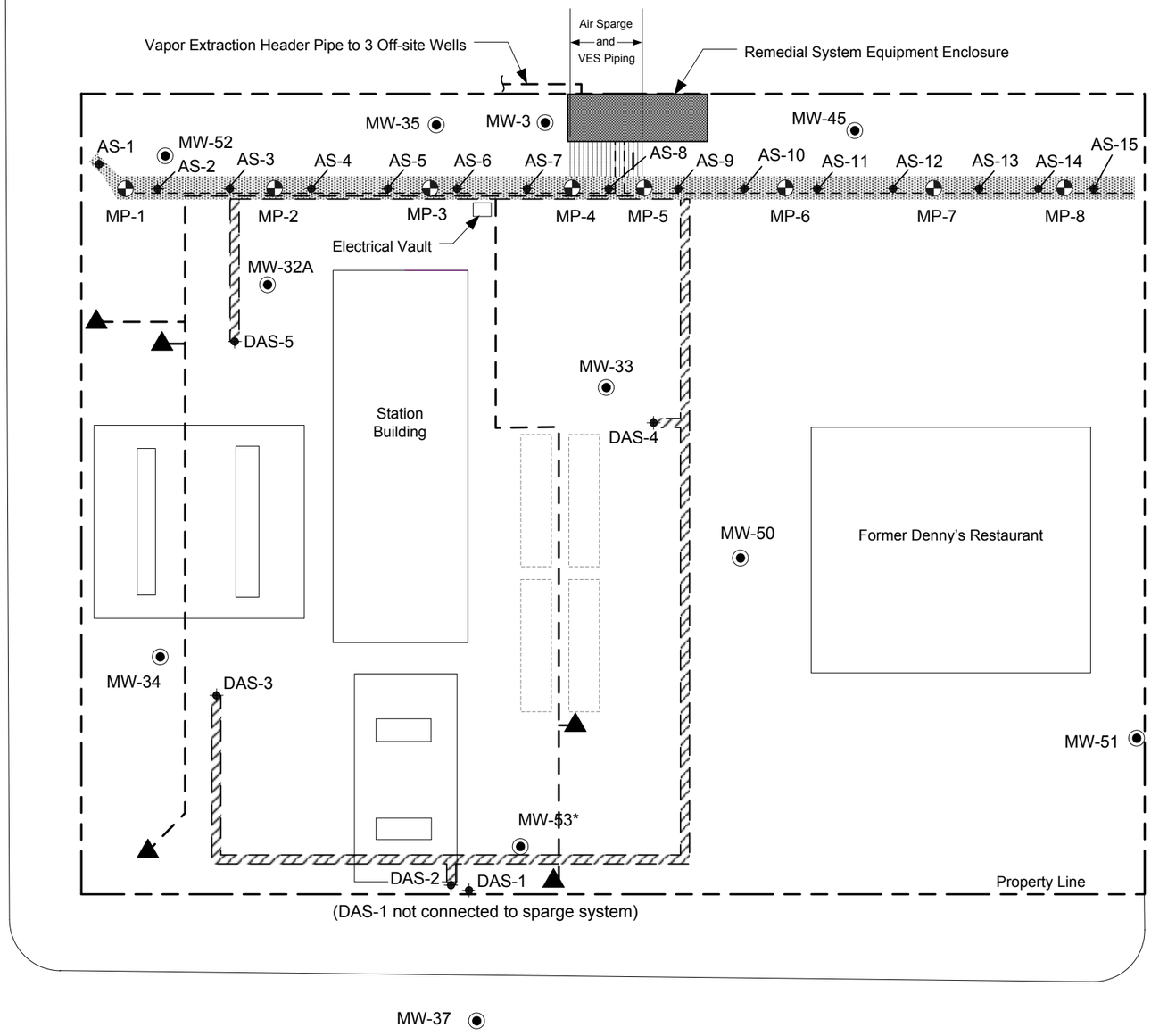
Date	Header Pressure (psig)	Air Flowrates per Air Sparge Point (SCFM)														
		AS-1	AS-2	AS-3	AS-4	AS-5	AS-6	AS-7	AS-8	AS-9	AS-10	AS-11	AS-12	AS-13	AS-14	AS-15
01/29/04	5	11	12	12	10	11	12	13	8	8	3	<3	5	11	12	8
02/28/04	4	11	12	14	11	11	12	13	8	8	3	4	<3	10	11	9
03/30/04	5	11	12	14	11	12	12	14	8	8	<3	<3	<3	10	12	8
04/28/04	NM	10.5	11.5	14	10.5	11	11.5	13.5	8	7.5	<3	<3	<3	9	10.5	7
05/27/04	4.5	10	11	14	9	10	11	12	7	7	<3	<3	<3	5.5	9	7.5
06/22/04	4.5	11	11	14	10	11	11	12	12.5	11	<3	<3	<3	<3	10	8
Average:	**4.6**	**10.8**	**11.6**	**13.7**	**10.3**	**11.0**	**11.6**	**12.9**	**8.6**	**8.3**	**3.0**	**4.0**	**5.0**	**9.1**	**10.8**	**7.9**

Notes:
psig = pounds per square inch, gauge
SCFM = standard cubic feet per minute

TABLE 3
DEEP AIR SPARGE UNIT OPERATIONAL SUMMARY
ConocoPhillips Site No. 255353
600 Westlake Avenue North
Seattle, Washington

Date	Header Pressure (psig)	Air Flowrates per Air Sparge Point (SCFM)				
		DAS-1	DAS-2	DAS-3	DAS-4	DAS-5
01/29/04	NIO	NIO	NIO	NIO	NIO	NIO
02/28/04	12	NIO	3	5	3.5	<3
03/30/04	NIO	NIO	NIO	NIO	NIO	NIO
04/28/04	NIO	NIO	NIO	NIO	NIO	NIO
05/27/04	NIO	NIO	NIO	NIO	NIO	NIO
06/22/04	NIO	NIO	NIO	NIO	NIO	NIO

Notes:
psig = pounds per square inch, gauge
SCFM = standard cubic feet per minute
NIO = not in operation



LEGEND

AS-1	BIOSPARGE TRENCH AIR SPARGING WELL
DAS-2	DEEP AIR SPARGING WELL
MW-3	GROUNDWATER MONITORING WELL
MP-1	MULTIPURPOSE WELL (MONITORING OR REMEDIATION)
	VAPOR EXTRACTION WELL AND APPROXIMATE LOCATION OF VE CONVEYANCE PIPING
	TRENCHING FOR DEEP SPARGE CONVEYANCE PIPING
	BIOSPARGE TRENCHING
	BIOSPARGE TRENCH HORIZONTAL VAPOR EXTRACTION PIPING

0 30 FT

APPROX. SCALE

Site map based on drawing prepared by GeoEngineers dated 6/03

FIGURE 1

REMEDIAL SYSTEM SITE MAP

CONOCO PHILLIPS SITE NO. 255353
600 WESTLAKE AVENUE NORTH
SEATTLE, WASHINGTON

PROJECT NO. WA25-535-2	DRAWN BY TS 6/25/04
FILE NO. WA25-535-2	PREPARED BY TS 9/1/04
REVISION NO. 0	REVIEWED BY EL

Delta Environmental Consultants, Inc.