



MWD-11	
Benzene	13
Toluene	3.8
Ethylbenzene	6.6
Xylenes	<3.0

MWD-8	
Benzene	7.0
Toluene	1.4
Ethylbenzene	4.8
Xylenes	<3.0

MWD-2	
Benzene	6.2
Toluene	1.0
Ethylbenzene	3.6
Xylenes	<3.0

MWD-1	
Benzene	3.7
Toluene	<1.0
Ethylbenzene	3.1
Xylenes	<3.0

MWD-9	
Benzene	10
Toluene	<1.0
Ethylbenzene	1.4
Xylenes	<3.0

MWD-7	
Benzene	2.3
Toluene	<1.0
Ethylbenzene	2.8
Xylenes	<3.0

MWD-15	DUP3	
Benzene	440	420
Toluene	1.4	1.4
Ethylbenzene	210	210
Xylenes	56	55

RW-8	
Benzene	95
Toluene	5.0
Ethylbenzene	19
Xylenes	220

MWD-17	
Benzene	2400
Toluene	<5.0
Ethylbenzene	34
Xylenes	22

MWD-14	
Benzene	1400
Toluene	<5.0
Ethylbenzene	16
Xylenes	<15

MWD-16	
Benzene	770
Toluene	1.6
Ethylbenzene	300
Xylenes	170

MWD-3	
Benzene	4100
Toluene	<20
Ethylbenzene	160
Xylenes	87

RW-7	
Benzene	13
Toluene	5.3
Ethylbenzene	3.7
Xylenes	3.4

MWD-10	
Benzene	700
Toluene	1.1
Ethylbenzene	10
Xylenes	18

MWD-12	
Benzene	900
Toluene	<5.0
Ethylbenzene	69
Xylenes	25

MWD-4	
Benzene	2.8
Toluene	1.0
Ethylbenzene	11
Xylenes	9.2

RW-6	
Benzene	15
Toluene	4.9
Ethylbenzene	4.8
Xylenes	7.4

MWD-13	DUP1	
Benzene	1.2	1.2
Toluene	<1.0	<1.0
Ethylbenzene	3.6	3.6
Xylenes	3.1	3.1

MWD-6	
Benzene	5.8
Toluene	<1.0
Ethylbenzene	8.3
Xylenes	<3.0

MWD-5	
Benzene	5000
Toluene	63
Ethylbenzene	470
Xylenes	110

WELL ID	TVV-6	
Benzene	10	EXCEEDENCE
Toluene	6	DETECTION
Ethylbenzene	NS	NOT SAMPLED
Xylenes	<1.0	ALL CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)

- NOTES:**
- SAMPLES WERE COLLECTED IN FEBRUARY 2009 BY THE PREVIOUS SITE CONSULTANT.
 - VOLATILE ORGANIC COMPOUNDS (VOCs) WERE ANALYZED BY EPA METHOD 8021B.
 - BOLD INDICATES THAT A COC WAS DETECTED.
 - SHADING INDICATES THAT A DETECTED RESULT EXCEEDED THE MNMCC STANDARD.

LEGEND

- TARGA'S ACTIVE INJECTION WELL
- MONITOR WELL LOCATION (SHALLOW)
- MONITOR WELL LOCATION (DEEP)
- RECOVERY WELL LOCATION
- WATER WELL LOCATION (INACTIVE)
- OFFSITE PROPERTY WELLS "NOT SAMPLED"
- HYDROCARBON INVESTIGATION AREA
- CHLORIDE INVESTIGATION AREA
- APPROXIMATE EXTENT OF LNAPL PLUME
- BENZENE CONTOUR (µg/L)

NOTES

- A SURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE SLOP OIL SUMP IN JULY 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TOTAL DEPTH OF 10 FEET. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH AND LIGHT NONHAZARDOUS HYDROCARBONS WERE ENCOUNTERED IN THE SURFACE INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE SURFACE INVESTIGATION REPORT DATED SEPTEMBER 1996. REMEDIAL ACTIVITIES FOR THE SLOP OIL SUMP INCLUDED REMOVAL OF THE SUMP IN SEPTEMBER 2000. THE EXCAVATION AREA MEASURED 20 X 30 X 10'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (10') INDICATED HYDROCARBON IMPACTS IN THE SOILS. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2000 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2001.
- A SURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE OIL A WATER SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TOTAL DEPTH OF 10 FEET. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS IN THE INTERMEDIATE SOILS AT 17 FEET BGS AND LIGHT WAS ENCOUNTERED IN THE SURFACE INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE SURFACE INVESTIGATION REPORT DATED SEPTEMBER 1996. REMEDIAL ACTIVITIES FOR THE SLOP OIL SUMP INCLUDED REMOVAL OF THE SUMP IN SEPTEMBER 2000. THE EXCAVATION AREA MEASURED 20 X 30 X 10'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (10') INDICATED HYDROCARBON IMPACTS IN THE SOILS. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2000 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2001.
- A SURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE JET TURBINE SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TOTAL DEPTH OF 10 FEET. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH AND LIGHT NONHAZARDOUS HYDROCARBONS WERE ENCOUNTERED IN THE SURFACE INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE SURFACE INVESTIGATION REPORT DATED SEPTEMBER 1996. REMEDIAL ACTIVITIES FOR THE JET TURBINE SUMP INCLUDED REMOVAL OF THE SUMP IN SEPTEMBER 2000. THE EXCAVATION AREA MEASURED 20 X 30 X 10'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (10') INDICATED HYDROCARBON IMPACTS IN THE SOILS. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2000 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2001.
- TWO SEPARATE SHALLOW SURFACE INVESTIGATIONS WERE CONDUCTED IN THE VICINITY OF ENGINE SUMP #8 IN AUGUST 1996 AND JUNE 1997. THE AUGUST 1996 INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SHALLOW SOIL BORING TO A TOTAL DEPTH OF 10 FEET. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH. THE JUNE 1997 INVESTIGATION INCLUDED THE INSTALLATION OF THREE SHALLOW SOIL BORINGS (EAST, WEST & SOUTH OF THE SUMP) TO A MAXIMUM DEPTH OF 4 FEET BGS. NO HYDROCARBONS WERE DETECTED IN ANY OF THE THREE BORINGS AT DEPTH (4 FEET). INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE FINAL INVESTIGATION REPORT GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. DATED JULY 1997.
- A SHALLOW SURFACE INVESTIGATION WAS PERFORMED IN THE VICINITY OF ENGINE SUMP #3 IN AUGUST 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TOTAL DEPTH OF 10 FEET. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH. INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE SURFACE INVESTIGATION REPORT DATED SEPTEMBER 1996.
- A SHALLOW SURFACE INVESTIGATION WAS CONDUCTED ON THE SOUTHWEST CORNER OF THE EMERGENCY FLARE SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED A SHALLOW TRENCH (TEST PIT) THAT WAS EXCAVATED TO 5 FEET BGS. CONFIRMATION SAMPLES AT DEPTH (5 FEET BGS) WERE BELOW LABORATORY DETECTION LIMITS. INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE SURFACE INVESTIGATION REPORT DATED SEPTEMBER 1996.
- AN INTERMEDIATE SURFACE INVESTIGATION WAS PERFORMED IN THE VICINITY OF THE HOS FLARE SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TOTAL DEPTH OF 27 FEET BGS. HYDROCARBON IMPACTS WERE DETECTED IN THE SHALLOW (10 FEET) SOILS NEAR THE HOS FLARE SUMP. ANALYTICAL RESULTS AT THE 27 FEET BGS INTERVAL WERE BELOW LABORATORY DETECTION LIMITS. INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE SURFACE INVESTIGATION REPORT DATED SEPTEMBER 1996.
- A SURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF FIELD OIL PIT #0 IN NOVEMBER 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TOTAL DEPTH (TD) OF FORTY-EIGHT (48) FEET BELOW GROUND SURFACE (BGS). ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS EXTENDED TO 40 FEET BGS. GROUNDWATER WAS NOT ENCOUNTERED DURING THE INSTALLATION OF THE BORING. INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE FINAL INVESTIGATION REPORT GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. DATED JULY 1997. REMEDIAL ACTIVITIES FOR THE FIELD OIL PIT #0 INCLUDED OVER EXCAVATION ACTIVITIES THAT WERE PERFORMED IN FEBRUARY 2000. TOTAL OF 312 CUBIC YARDS OF SOIL WERE REMOVED. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2000 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2001.
- THE EAST SUMP WAS CONSTRUCTED OF CONCRETE AND MEASURED 8 X 8 X 30'. THE EAST SUMP WAS REMOVED IN SEPTEMBER 2000 AND THE AREA WAS OVER EXCAVATED TO APPROXIMATELY 8 X 13 X 10'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (10') INDICATED HYDROCARBON IMPACTS IN THE SOILS. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2000 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2001.
- A SURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE CONCRETE DRUM SUMP IN SEPTEMBER 2000. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING TO A TD OF 51 FEET BGS. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH. REMEDIAL ACTIVITIES FOR THE CONCRETE DRUM SUMP INCLUDED REMOVAL OF THE SUMP IN SEPTEMBER 2000. THE EXCAVATION AREA MEASURED 8 X 13 X 9'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (10') INDICATED HYDROCARBON IMPACTS IN THE SOILS. BOTH INVESTIGATION AND REMEDIATION ACTIVITIES ARE SUMMARIZED IN THE 2000 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2001.
- THE NORTH BRINE WATER RETENTION POND (POND #2) MEASURED APPROXIMATELY 245 X 245 X 10' AND HAD A DESIRED CAPACITY OF 2000 BARRELS (BBLs). USAGE OF THIS POND WAS DISCONTINUED IN EARLY 1998. THIS NORTH BRINE WATER RETENTION POND WAS CAPPED AND CROWNED WITH A CLAY CAP IN LATE 2000.
- THE SOUTH BRINE WATER RETENTION POND (POND #4) MEASURED APPROXIMATELY 190 X 280 X 10' AND HAD A DESIRED CAPACITY OF 8200 BARRELS (BBLs). USAGE OF THIS POND WAS DISCONTINUED IN MID 1998. THIS SOUTH BRINE WATER RETENTION POND WAS CAPPED AND CROWNED WITH A CLAY CAP IN LATE 2000.
- THE FORMER TANK BATTERY LOCATION WAS STRUCK BY LIGHTNING IN MAY 2005. THIS FORMER TANK BATTERY LOCATION WAS USED FOR FLUID (LAMP) AND PRODUCED WATER STORAGE BY THE GROUNDWATER REMEDIATION SYSTEM LOCATED ON THE EAST SIDE OF THE PLANT. APPROXIMATELY 300 BBLs OF FLUID WERE RELEASED AND 200 BBLs WERE RECOVERED. DISCUSSION OF THE FORMER TANK BATTERY IS SUMMARIZED IN A TRANSMITTAL LETTER OF A SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR THE ENUNCE SOUTH GAS PLANT GENERATED BY SECOR INTERNATIONAL INC. DATED MARCH 3, 2006.
- A SURFACE INVESTIGATION WAS CONDUCTED IN THE VICINITY OF THE FORMER TRUCK LOADING AREA LOCATED SOUTH OF THE PLANT IN NOVEMBER 2005. THE INVESTIGATION INCLUDED THE INSTALLATION OF 3 BORINGS TO GROUNDWATER. HYDROCARBON IMPACTS WERE DETECTED IN THE SHALLOW (4 FEET BGS) AND IN THE INTERMEDIATE (25-30 BGS) IN AT LEAST ONE BORING. TWO OF THE THREE WELLS WERE CONVERTED INTO MONITOR WELLS (MW) 25 & 30. INVESTIGATION ACTIVITIES ARE SUMMARIZED IN THE 2005 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION FOR THE SOUTH ENUNCE GAS PLANT GENERATED BY SECOR INTERNATIONAL INC. IN JULY 2005.
- THE NORTHWEST BRINE WATER RETENTION POND (POND #3) WAS CAPPED IN JULY 2001. DEMOLITION ACTIVITIES OF THE SOUTHWEST BRINE WATER RETENTION POND (POND #5) ARE SUMMARIZED IN THE 2001 ANNUAL SUMMARY OF INVESTIGATION AND REMEDIATION FOR THE SOUTH ENUNCE GAS PLANT GENERATED BY SECOR INTERNATIONAL INC. IN MARCH 2001.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Chevron Environmental Management Company

ENUNCE SOUTH

BTEX CONCENTRATION MAP DEEP WELLS - FEBRUARY 2009

CONESTOGA-ROVERS & ASSOCIATES

USGS 1998 AERIAL

Project Manager: T. ORNELAS Reviewed By: T. LARSON Date: FEBRUARY 2009

Scale: 1:100 Project No: 055271-09 Report No: 002 Drawing No: 010

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