



- 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
  - 3280.00 — GROUNDWATER ELEVATION CONTOUR
  - 3280.00 GROUNDWATER ELEVATION (FEET)
  - REGIONAL GROUNDWATER FLOW DIRECTION

- NOTES:**
1. GROUNDWATER ELEVATIONS WERE COLLECTED IN FEBRUARY 2009.
  2. DEPTH TO GROUNDWATER WAS GAUGED FROM TOP OF CASING.
  3. CONTOUR INTERVAL IS 0.5 FEET.

- NOTES**
1. A SUBSURFACE 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 DUE SOUTH OF THE SUMP TO A TD OF 57 FEET BGS. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH AND LIGHT NONGAUGEABLE HYDROCARBONS (LNAPL) WERE ENCOUNTERED ON THE EXCAVATION AT DEPTH (10) INDICATED HYDROCARBON IMPACTS IN THE SOILS REMOVED. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  2. A SUBSURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE SLOP OIL SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING DUE SOUTH OF THE SUMP TO A TD OF 57 FEET BGS. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH AND INTERMEDIATE SOILS AT 17 FEET BGS AND LNAPL WERE ENCOUNTERED ON THE EXCAVATION AT DEPTH (10) INDICATED HYDROCARBON IMPACTS IN THE SOILS REMOVED. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  3. A SUBSURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE SLOP OIL SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING DUE SOUTH OF THE SUMP TO A TD OF 57 FEET BGS. ANALYTICAL RESULTS INDICATED HYDROCARBON IMPACTS AT DEPTH AND INTERMEDIATE SOILS AT 17 FEET BGS AND LNAPL WERE ENCOUNTERED ON THE EXCAVATION AT DEPTH (10) INDICATED HYDROCARBON IMPACTS IN THE SOILS REMOVED. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  4. TWO SEPARATE SHALLOW SUBSURFACE INVESTIGATIONS WERE CONDUCTED IN THE VICINITY OF ENGINE SUMP #28 IN AUGUST 1998 AND JUNE 1997. THE AUGUST 1998 INVESTIGATION INCLUDED THE INSTALLATION OF A SHALLOW SOIL BORING DUE NORTH OF THE ENGINE SUMP #28 TO A TD OF 10 FEET BGS. RESULTS AT 10 FEET BGS INDICATED HYDROCARBON IMPACTS AT DEPTH. THE JUNE 1997 INVESTIGATION INCLUDED THE INSTALLATION OF THREE ADDITIONAL SHALLOW SOIL BORINGS DUE SOUTH OF THE ENGINE SUMP #28 TO A TD OF 10 FEET BGS. NO HYDROCARBONS WERE DETECTED IN ANY OF THE THREE BORINGS AT DEPTH (4 FEET). INVESTIGATION ACTIVITIES ARE DETAILED IN THE FINAL INVESTIGATION REPORT GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. DATED MAY 1997.
  5. A SHALLOW SUBSURFACE INVESTIGATION WAS PERFORMED IN THE VICINITY OF ENGINE SUMP #31 IN AUGUST 1996. THIS INVESTIGATION INCLUDED THE INSTALLATION OF A SINGLE SOIL BORING DUE SOUTH OF THE SUMP TO A TD OF 57 FEET BGS. NO HYDROCARBON IMPACTS WERE DETECTED AT DEPTH. INVESTIGATION ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  6. A SHALLOW SUBSURFACE INVESTIGATION WAS CONDUCTED ON THE SOUTHWEST CORNER OF THE EMERGENCY FLARE SUMP IN AUGUST 1996. THE INVESTIGATION INCLUDED A SHALLOW TRUCK TEST PIT THAT WAS EXCAVATED TO 5 FEET BGS. CONFIRMATION SAMPLES AT DEPTH (5 FEET BGS) WERE BELOW LABORATORY DETECTION LIMITS. INVESTIGATION ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  7. AN INTERMEDIATE SUBSURFACE INVESTIGATION WAS PERFORMED IN THE VICINITY OF THE H2S FLARE SUMP IN AUGUST 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 EXTENDING TO 40 FEET BGS. GROUNDWATER WAS NOT ENCOUNTERED DURING THE INSTALLATION OF THE BORING. INVESTIGATION ACTIVITIES ARE DETAILED IN THE FINAL INVESTIGATION REPORT GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. DATED JULY 1997. REMEDIAL ACTIVITIES FOR THE FIELD OIL PIT #20 INCLUDED OVER-EXCAVATION ACTIVITIES THAT WERE PERFORMED IN FEBRUARY 2000. A TOTAL OF 312 CUBIC YARDS OF SOIL WERE REMOVED. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  8. A SUBSURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF FIELD OIL PIT #20 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 EXTENDING TO 40 FEET BGS. GROUNDWATER WAS NOT ENCOUNTERED DURING THE INSTALLATION OF THE BORING. INVESTIGATION ACTIVITIES ARE DETAILED IN THE FINAL INVESTIGATION REPORT GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. DATED JULY 1997. REMEDIAL ACTIVITIES FOR THE FIELD OIL PIT #20 INCLUDED OVER-EXCAVATION ACTIVITIES THAT WERE PERFORMED IN FEBRUARY 2000. A TOTAL OF 312 CUBIC YARDS OF SOIL WERE REMOVED. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  9. THE EAST SUMP WAS CONSTRUCTED IN SEPTEMBER 2000 AND MEASURED 8' X 8' X 3'. THE EAST SUMP WAS REMOVED IN SEPTEMBER 2000 AND THE AREA WAS OVER-EXCAVATED TO APPROXIMATELY 8' X 12' X 10'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (5) INDICATED HYDROCARBON IMPACTS IN THE SOILS. REMEDIAL ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  10. A SUBSURFACE INVESTIGATION WAS PERFORMED IN THE DIRECT VICINITY OF THE CONCRETE DRAIN 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 DRAIN SUMP INCLUDED REMOVAL OF THE SUMP IN SEPTEMBER 2000. THE EXCAVATION AREA MEASURED 8' X 12' X 10'. CONFIRMATION SAMPLES FROM THE EXCAVATION AT DEPTH (5) INDICATED HYDROCARBON IMPACTS IN THE SOILS. BOTH INVESTIGATION AND REMEDIATION ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION & REMEDIATION GENERATED BY HIGHLANDER ENVIRONMENTAL CORP. IN 2009.
  11. THE NORTH BRINE WATER RETENTION POND (POND #3) MEASURED APPROXIMATELY 243' X 243' X 15' AND HAD A DESIGNED CAPACITY OF 75,000 BARRELS (BBL'S). LEASE OF THIS POND WAS DISCONTINUED IN EARLY 1998. THE NORTH BRINE WATER RETENTION POND WAS CAPPED AND CROWNED WITH A CLAY CAP IN LATE 2000.
  12. THE SOUTH BRINE WATER RETENTION POND (POND #4) MEASURED APPROXIMATELY 105' X 240' X 16' AND HAD A DESIGNED CAPACITY OF 62,500 BARRELS (BBL'S). LEASE OF THIS POND WAS DISCONTINUED IN EARLY 1998. THE SOUTH BRINE WATER RETENTION POND WAS CAPPED AND CROWNED WITH A CLAY CAP IN LATE 2000.
  13. THE FORMER TANK BATTERY LOCATION WAS STRUCK BY LIGHTNING IN MAY 2001. THIS FORMER TANK BATTERY LOCATION WAS USED FOR FLUID LNAPL AND PRODUCED WATER STORAGE BY THE GROUNDWATER REMEDIATION SYSTEMS LOCATED ON THE EAST SIDE OF THE PLANT. APPROXIMATELY 200 BBL'S OF FLUIDS WERE RELEASED AND 300 BBL'S WERE RECOVERED. DEMOLITION OF THE FORMER TANK BATTERY IS SUMMARIZED IN A TRANSMITTAL LETTER OF A DEM-ANNUAL GROUNDWATER MONITORING REPORT FOR THE ELNAGE SOUTH GAS PLANT GENERATED BY SECOR INTERNATIONAL INC. DATED MARCH 3, 2006.
  14. A SUBSURFACE 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 2 BORINGS TO GROUNDWATER. HYDROCARBON IMPACTS WERE DETECTED IN THE SHALLOW (6.6 FEET BGS) AND IN THE INTERMEDIATE (20.2 FEET BGS) IN AT LEAST ONE BORING. TWO OF THE THREE WELLS WERE CONVERTED INTO MONITOR WELLS (MW 32 & MW 50). INVESTIGATION ACTIVITIES ARE DETAILED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION AND REMEDIATION FOR THE SOUTH ELNAGE GAS PLANT GENERATED BY SECOR INTERNATIONAL INC. IN JULY 2006.
  15. THE NORTHWEST BRINE WATER RETENTION POND (POND #5) WAS CAPPED IN JULY 2007. DEMOLITION ACTIVITIES OF THE SOUTHWEST BRINE WATER RETENTION POND (POND #6) ARE SUMMARIZED IN THE 2009 ANNUAL SUMMARY OF INVESTIGATION AND REMEDIATION FOR THE SOUTH ELNAGE GAS PLANT GENERATED BY SECOR INTERNATIONAL IN MARCH 7, 2007.

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

**Chevron Environmental Management Company**  
**ENUNICE SOUTH**  
**GROUNDWATER GRADIENT MAP**  
**DEEP WELLS - FEBRUARY 2009**

**CONESTOGA-ROVERS & ASSOCIATES**

Source Reference: USGS 1998 AERIAL

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