EXPLORATION LOG SA166

PROJECT: T	RONOX PHASI	EB	
EXPLORATIO	N LOCATION:	TRONOX AREA 1	
EXPLORATIO	N SIZE (dia.):	3" CORE BARREL	
ELEVATION:	EXISTING GR	OUND SURFACE	

PROJECT NO.: 20092518V1

EXPLORATION	NDATE: <u>6/29/2009</u>			
EQUIPMENT:	SDC550-24 SONIC CORE RIG			
LOGGED BY: SEARS/BRINKERHOFF				

INITIAL DEPTH TO WATER: NOT ENCOUNTERED FINAL DEPTH TO WATER: NOT ENCOUNTERED

DATE MEASURED: NA DATE MEASURED: NA

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~									
LEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	d	٦٢	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL CONSTRUCTION
- 2.5		Fill	Yellowish brown (10YR 5/4) poorly graded SAND with silt and gravel. 60% sand (85% fs, 15% ms), 25% silt, 15% gravel (subangular- subrounded), moist, strong reaction to HCl, weakly cemented, medium dense.						
- 5 - - - 7.5 -		SP-SM	Reddish brown (5YR 4/4) poorly graded SAND with silt. 70% sand (80% fs, 20% cs), 30% silt, trace gravel, moist, weakly to moderately cemented, strong reaction to HCI, medium dense.						
- 10 	28 24 40		Collect sample SA166-10B, PID readings: 10.6 eV=3.4ppmV, 11.7 eV=2.2 ppmV, yellowish brown.						
- 12.5 - - - - 15 -		ML	Reddish brown (5YR 5/4) SILT with sand. 65% silt, 35% sand (90% fs, 10% ms), trace gravel, dry, strong reaction with HCI.		- Protocological de la constanta de la constant				
-	The descriptions contained It	within this e	xploration log apply only at the specific exploration location and at the t ed to be representative of subsurface conditions at other locations or ti	me the	e explo	ration was	made.		

Figure No.

## EXPLORATION LOG SA166

 PROJECT:
 TRONOX PHASE B

 EXPLORATION LOCATION:
 TRONOX AREA 1

 EXPLORATION SIZE (dia.):
 3" CORE BARREL

 ELEVATION:
 EXISTING GROUND SURFACE

PROJECT NO.: 20092518V1

EXPLORATION DATE: 6/29/2009 EQUIPMENT: SDC550-24 SONIC CORE RIG LOGGED BY: SEARS/BRINKERHOFF

INITIAL DEPTH TO WATER: NOT ENCOUNTERED FINAL DEPTH TO WATER: NOT ENCOUNTERED

DATE MEASURED: NA DATE MEASURED: NA

VATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	Id.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL
- 17.5 - -		SP-SM	Reddish brown (5YR 5/4) poorly graded silty SAND. 65% sand (70% fs, 30% cs), 35% silt, trace gravel, dry, moderately cemented, laminated, strong reaction with HCI.					
- - 20 - - - 22.5	50/5		Collect sample SA166-20B. weak to no reaction with HCl, increasing gypsum content (10%) as fine grained crystals and matrix. PID readings: 10.6 eV=4.6 ppmV, 11.7 eV=3.9 ppmV.					
- 25								
- - 27.5 - -		SC	Muddy Creek Formation, abrupt contact with overlying sand. Yellowish Brown (10YR 5/4) clayey SAND. 65% fine grained sand, 35% lean clay, trace gypsum (as matrix), moist, laminated, no reaction with HCl, stiff.					
- 30	12 31 30		Collect sample SA166-31B. PID readings: 10.6 eV=2.1ppmV, 11.7 eV=1.3 ppmV					
- 		within this of	END OF BORING AT 32.5 FEET					

**GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.** 

Figure No.