SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT CONSTRUCTION CLOSEOUT REPORT

VOLUME I OF IV

Prepared For:

BP OIL 200 PUBLIC SQUARE 7-3556-I CLEVELAND, OH 44114-2375

Prepared By:

McLaren/Hart Environmental Engineering Corporation 8500 Brooktree Road, Suite 300 Wexford, Pennsylvania 05090

OCTOBER 1994



October 11, 1994

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Mr. Donald R. Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 441142375

PROJECT NO. 09.0801056

SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO. MB275-94

SUBJECT: Final Construction Closeout Report/As-Built Drawings

SR/GWTP, Carborundum Facility

Sanborn, New York

Dear Mr. Langshaw:

Enclosed please find a copy of the Final Construction Closeout Report and As-Built Drawings for the above-mentioned facility. McLaren/Hart has prepared this report in response to comments received from Haley & Aldrich in their letters dated September 2, 1994 and October 3, 1994.

Please note that after repeated requests from McLaren/Hart, Ferguson Electric (Ferguson) has not provided us with the following final electrical drawings:

- Heat trace system drawings;
- PLC Logic Printout (McLaren/Hart has a working version at the site.); and
- Panel layout drawings.

McLaren/Hart will continue to work and use all available means in securing these drawings as a fulfillment of Ferguson's contractual obligations. McLaren/Hart will submit these as an addendum to this package when they are received. We believe that this report and attached asbuilt drawings are of sufficient quality and detail to satisfy NYSDEC requirements.

(BP\0801056\MB275-94.MQP)

Mr. Donald R. Langshaw October 11, 1994 Page 2

We trust that this package meets with your general requirements. Please call if you have any questions.

Sincerely,

McLAREN/HART

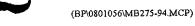
Matt Plautz, P.E.

Project Manager

Enclosures

cc: Dave Hagen - H&A (3 copies; 2 for NYSDEC submittal)

Vince Wroniewicz, P.E. Rick Becken (Site Operator)





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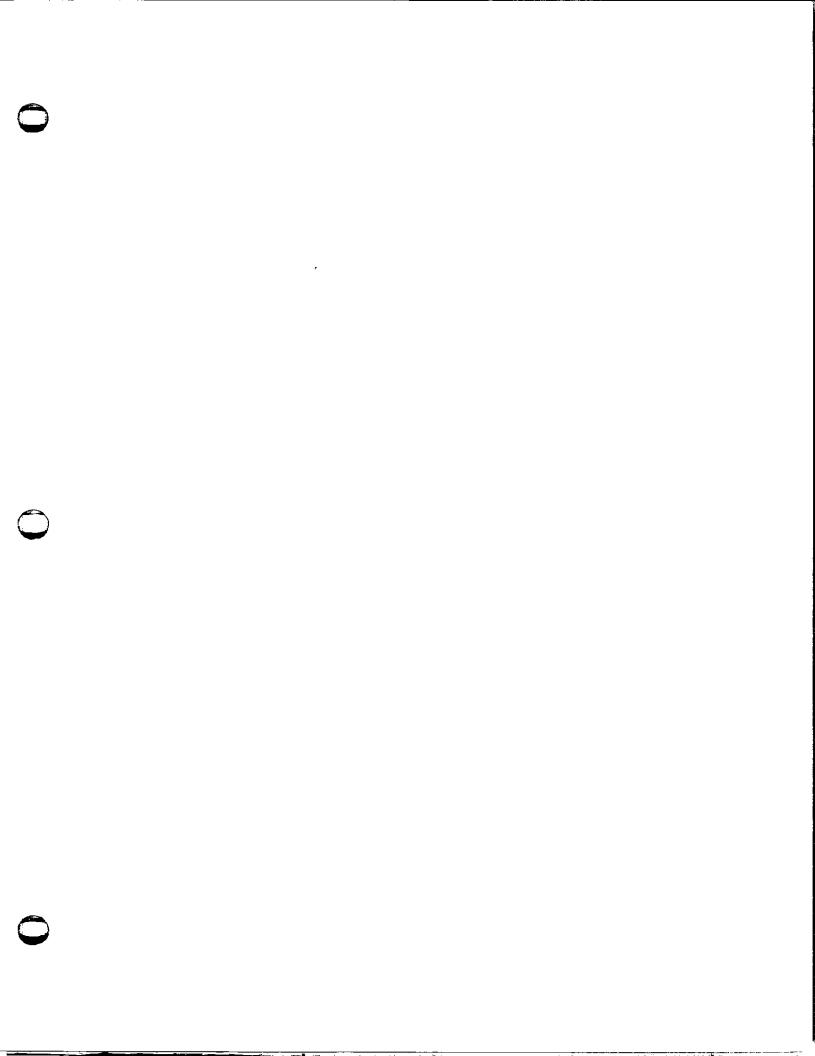


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1.0 INTRODUCTION

This Construction Closeout Report (CCR) has been prepared by McLaren/Hart Environmental Engineering Corporation (McLaren/Hart) in accordance with the requirements of the Order on Consent which BP/Carborundum has entered into with the New York State Department of Environmental Conservation (NYSDEC). This report summarizes the construction activities of the Soil Remediation/Groundwater Treatment System built for BP Oil Company at Carborundum's facility in Wheatfield, NY. The CCR documents construction activities, health and safety compliance, major design modifications, as-built conditions, system testing, system start-up, online status, and a New York State licensed Professional Engineer's certification.

An Operation and Maintenance (0&M)manual was developed for the Soil Remediation/Groundwater Treatment System as a guide to general operations. A draft of the O&M manual was submitted to BP Oil Company and NYSDEC on April 22, 1994. Responses to the NYDEC comments on the draft O&M manual were sumbitted on June 20, 1994 to Haley & Aldrich and subsequently submitted to NYSDEC. The final O&M Manual will include final NYSDEC comments and operational modifications based on start-up conditions.

2.0 PROJECT DESCRIPTION

2.1 BACKGROUND

The Carborundum Company entered into a consent order with the NYSDEC to remediate the soil at their Specialty Graphite Unit facility currently operated by Metaullics Systems Division in Wheatfield, NY. BP Oil Company (BP), the parent company of Carborundum, issued a Request For Proposal (RFP) to complete the design, permitting, construction, operation, monitoring, maintenance and decommissioning of the soil remediation program. The primary remediation technology, as identified in the RD/RA Work Plan, required to remediate the impacted soil, was in-situ Soil Vapor Extraction (SVE). Due to the elevation of the groundwater in the remediation area a dewatering program was required to supplement the SVE system.

The remediation area is approximately 90,000 square feet in area and is contaminated with volatile chlorinated compounds, primarily trichloroethene (TCE). The treatment system included provisions for treating both groundwater produced from existing and recently installed extraction wells along with vapors extracted from the impacted soil. The design for the system was submitted to the NYSDEC on August 26, 1993.

McLaren/Hart developed a Work Plan for the installation of the Soil Remediation/Groundwater Treatment System. The Work Plan was submitted to the NYSDEC on October 6, 1993. NYSDEC provided comments on this Work Plan on November 8, 1993. McLaren/Hart responded to these comments to the NYSDEC on December 7, 1993. The Work Plan included design objectives, installation procedures, and construction activities as well as a Quality Assurance/Quality Control Plan (QA/QCP) and a Site Specific Health and Safety Plan (SSHSP).

A significant factor influencing the effectiveness of a SVE system for removal of volatile contaminants from the subsurface, is soil type. Soils exhibiting low permeability characterization, such as clays and silts encountered at this site, are challenging due to the limited ability to adequately draw vapor through the subsurface. Based on the results of the TerraVac pilot study (Ecology & Environment Inc., October, 1992), it was determined that the application of a high vacuum system (>20" Hg) would be warranted. Engineered controls to prevent well and piping failures due to the system's high vacuum was considered during the design phase.

Inadequate subsurface vacuum may also limit the complete remediation relative to a specific Area of Concern (AOC). Airflow in cohesive materials will be significantly improved through the installed active air injection system. The active air injection system will enhance the permeability of the subsurface soils through desiccation of the silty clays and partial fracturing increasing intrusive pore space. This may help accelerate the time required to remediate the soil at the site.

3.0 CONSTRUCTION ACTIVITIES

3.1 SCOPE OF WORK

McLaren/Hart's contracted scope of work required the design of integrated soil remediation and groundwater treatment systems, construction of the treatment system according to the intent of the design, and operation of the constructed system until soil cleanup objectives are met. The following describes the primary aspects of the construction phase of the project:

The system was designed according to the basic design requirements identified in the RD/RA Work Plan (as addended). The system design was completed during the engineering phase by McLaren/Hart during the Summer of 1993. A brief description of the major remedial design components follows. Modifications were made to the design during the construction phase as determined necessary by McLaren/Hart and BP as described in Section 3.5.

- Surface Water Management Existing drainage flow patterns were upgraded to promote surface water drainage to the publicly owned treatment works (POTW).
- Groundwater Management Two groundwater extraction wells were installed to lower the groundwater to the top of bedrock, as redesigned by BP's oversight consultant Haley & Aldrich, to be integral in the site wide contaminant source control system.
- Soil Vapor Extraction System Eighty (80) vapor extraction wells, 155 piezometers (shield points), and 162 air injection wells were installed and piped via aboveground and underground lines (as appropriate) to the treatment system.
- Vapor Treatment System An air/water separator, particulate filters, vacuum blowers, ductwork, heat exchanger, and vapor phase carbon units were installed.
- Groundwater Treatment System An air stripper, carbon filter, various pumps, and tanks were installed along with transfer piping to facilitate groundwater and vapor treatment. The existing GRS was integrated with the new treatment plant. A discharge line was installed to carry effluent to the SPDES outfall.
- Treatment Building A pre-engineered Varco/Prudent building was constructed to house the treatment system.

- Low Permeability Cover System Bentomat® liner material was placed on the AOC on unpaved areas to minimized short circuiting of the SVE and to minimize infiltration of stormwater. The liner system was extended out 25 feet beyond the delineated AOC to provide for a buffer of protection. The bentomat was covered with one (1) inch crusher run stone.
- Ex-Situ Treatment Cell Excavated soil shown to be impacted by VOC was transported to an ex-situ treatment cell constructed on-site. Vapor will be extracted from the material utilizing the SVE system during the O&M phase of the project.

The construction of the system was implemented once the basic system design was completed and after BP/H&A review and approval. The NYSDEC provided verbal approval prior to the initiation of construction. The implementation of the soil remediation program included the construction of a pre-engineered building and the installation of various system components. The installed components included: Vapor Extraction (VE) and Air Injection (AI) wells, Piezometer (PZ), VE, AI and groundwater piping, various process treatment units, pumps, filters, blowers, duct work, instruments and an impermeable cover system.

3.2 CONSTRUCTION MANAGEMENT AND SUPERVISION

McLaren/Hart conducted construction management and supervision activities throughout the duration of the installation phase of the project. The following McLaren/Hart personnel were involved with the construction management activities including health and safety oversight:

- Project Manager Matt Plautz;
- Construction Task Manager Ken Andromalos;
- Construction Site Manager Brian Radus;
- Site Supervisor Rick Becken;
- Project Engineers Bob DeLisio, Syed Farooq, John Parker, Lisé Nielsen, and Christine Retherford;
- Electrical Engineer Shabad Khalsa;
- Hydrogeologist Steve Katzenstein; and

Health and Safety Officers - Julie Panko, Don Bigley, Mike D'Eufemia.

Key subcontractor foreman instrumental in the installation of the project included the following:

- Vince Cerrone, Armand Cerrone, Inc.;
- Mike Adams, John W. Danforth Company; and
- Jerry Mandi, Ferguson Electric Construction.

Construction management and supervision consisted of obtaining required air and construction permits, conducting visual inspections, providing day-to-day oversight of ongoing work, hiring and direct supervison of subcontractors, determining the necessity of design changes, schedule, construction tasks optimization, and collecting material samples to confirm the integrity of the material being installed (i.e., concrete, backfill, etc.) as contained in the McLaren/Hart Work Plan. In addition, soil samples were collected during the installation of various wells and field screened with an HNu. McLaren/Hart prepared a Permit to Construct air permit application for submittal to the NYSDEC, which was subsequently issued on October 1, 1993. McLaren/Hart prepared a draft SPDES (State Pollution Discharge Elimination System) permit application which was submitted to BP/Carborundum. BP/Carborundum subsequently submitted the SPDES permit application directly to NYSDEC.

The following documentation were completed during the construction phase of the project and are included in the noted appendices:

Appendix A Permits -

 Building permit, plumbing permit, plumbing inspection, air permit, electrical, and certificate of occupancy.

Appendix B Daily Field Logs -

- Construction field logs.
- List of Site Workers.

Appendix C Physical Analysis Results - See Section 4.0 for further discussion

- Compressive strength test data for concrete and flowable fill (all were above allowable minimum limits).
- Groundwater pipe hydrostatic and pneumatic test data (no visible leaks)
- Filter's Building pipe pressure test data (all passed)
- SPDES discharge line pneumatic test data (all passed)
- Treatment system hydrostatic test data (all passed)
- Field in-place density test data (all passed)

Appendix D Screening Results -

- Split spoon screening
- Soil cutting screening

Sampling included the collection of three split spoon samples from each VEW, grab samples from drill cuttings and excavated soils. The readings obtained from the HNu were used to evaluate the depth of screen intervals for the VEWs and to allow for the proper segregation and disposition of the drill cuttings and excavated soils. See Section 4.2.3 for a complete discussion of this program.

Appendix E Boring Logs -

AIW, VEW, piezometers, and groundwater wells installation logs.

Moist clay with trace granular material was the general soil conditions encountered. Wells were relocated based on installation constraints (i.e., sub-surface obstruction, overhead obstructions, etc.). Actual locations are shown on drawings sheet numbers M015, M016, and M017. VEW screen interval locations were based on field observations of subsoil during drilling and split spoon samples collected at each well. See Section 4.2 for a complete discussion of the installation phase of the project.

3.3 HEALTH & SAFETY

McLaren/Hart prepared and implemented a Site Specific Health and Safety Plan (SSHSP) that identified training requirements, standard McLaren/Hart operating protocol, and contaminate action level concentrations. In addition, McLaren/Hart followed the comprehensive Site Health and Safety Plan issued by Haley & Aldrich in January 1994, prepared during the construction phase of the project. McLaren/Hart conducted all work in compliance with the site health and safety provisions. McLaren/Hart provided a full-time experienced Site Health and Safety Officer (SHSO) for all intrusive work activities. Julie Panko, Don Bigley, and Mike D'Eufemia were utilized during the main construction work. Julie Panko (McLaren/Hart Senior Industrial Hygienist) coordinated the primary function and assignments of the SHSOs used during the project. The SHSO was responsible for conducting daily visual monitoring of site work to insure safe work practices were followed, providing air monitoring during intrusive work activities and proper calibration of monitoring equipment, insuring proper permits are in place prior to conducting confined space entry, intrusive work and hot work, conducting tailgate safety meetings to identify potential hazards, insuring workers have proper training prior to site entry, reporting of incidents/accidents occurring on the job, monitoring the handling of decontamination water, and set-up of work zones.

The SHSO set-up a work zone around areas where intrusive work was being conducted (i.e., drilling and trenching). The work zone included a Contaminated Reduction Zone (CRZ) where personnel decontamination occurred and the Exclusion Zone (EZ) where the work took place.

The SHSO completed a number of air and personnel monitoring and work permitting activities. The documentation of these activities are included in the appendices as noted and summarized below:

Appendix F Direct Reading Air Monitoring Logs -

 Air monitoring was completed utilizing an HNu, dust monitor, combustible gas indicator, and oxygen meter in and around the exclusion zone. The concentration indicated on the HNu was used as a basis for determining the need to upgrade PPE requirements. PPE upgrade was required on five separate occasions during well and trench installations. The well installations were PZ-29, VEW-40, VEW-42, and AI-87 occurring on November 9, November 13, November 19, and November 20, 1993 respectively. During the Filter's Building trenching activities on January 28, 1994 elevated HNu readings initiated a fifth PPE upgrade. On two occasions during the trenching activities (January 15 and January 20, 1994), PPE upgrades were implemented based on high dust levels during concrete cutting.

 Calibration of the monitoring instruments were completed in accordance with manufacturer's recommendations. A back up HNu and combustible gas/oxygen meter was on site during installation. Meters were replaced if proper calibrations were not achievable.

Appendix G Site Permits -

- Intrusive Work Permit intrusive work was approved by BP through the issue of an intrusive work permit prior to commencing drilling or trenching operations.
- Hot Work Permit flame or spark producing operations required a hot work permit to be in place prior to commencing work.
- Confined Space Entry Form confined space entry forms were completed prior to entering confined spaces (i.e., treatment tanks).

Appendix H Incident/Accident Reports -

- Six accidents occurred during installation. One of which resulted in lost time to a John W. Danforth employee.
- Three incidents occurred during installation. On October 22, 1993, one water line was hit during drilling. On February 14, 1994, one gas line was ruptured during trenching activities. On April 5, 1994, one electrical conduit was hit during trenching activities. All breaks were repaired without incident.
- One "near miss" occurred on December 7, 1993.

All reports were addressed during tailgate safety meetings after they occurred to inform site workers of the events to avoid similar occurrences. A complete compilation of these reports are contained in Appendix H.

Appendix I - Water Discharge Logs

- Water was discharged to the POTW in accordance with the RD/RA Work Plan.
- Decontamination water, well development water, and surface water collected in the AOC (i.e., trenches) was discharged to the POTW.

Tailgate safety meetings were conducted daily by the SHSO to inform site workers of past concerns, daily work operations, and potential hazards associated with daily site activities. The reports are on file in the site operations office.

All site workers hold certification of 40-hr training and 8-hr refresher training according to 40 CFR 1910.120 requirements. The certificates are on file with BP and at the site operations office. A list of site workers utilized during installation is included in Appendix B.

3.4 SOIL REMEDIATION/GROUNDWATER TREATMENT SYSTEM CONSTRUCTION

The installation of the remediation systems followed the design submitted by McLaren/Hart to the NYSDEC dated August 26, 1993 and followed the primary sequence as detailed in the work plan submitted to NYSDEC in October 1993. The following summarizes the major construction activities and their completion dates:

<u>ACTIVITY</u>	<u>START</u>	FINISH
Mobilization	10/06/93	10/18/93
Stormwater	10/15/93	04/20/94
Groundwater	10/15/93	12/23/93
Pipe Installation	01/15/94	05/27/94
Treatment Building	10/20/93	01/20/94
Treatment System	02/23/94	05/27/94
SVE System Installation	04/14/94	06/10/94
Protective Cover	10/13/94	05/22/94

Ex-situ Treatment Cell	10/15/93	01/14/94
Demobilization	03/11/93	08/01/94
Initial System Start-up	06/06/94	06/17/94

Various contractors were hired to assist in the completion of the project. The main contractors are listed below along with the areas of work they completed.

Empire Soils Investigations, Inc. Division (ESI) - ESI was hired to complete the installation of the VEWs, AIWs, PZs, and groundwater dewatering wells, PW-1 and PW-2.

Armand Cerrone Inc. (ACI) - ACI was hired to provide excavation services, and miscellaneous site labor requirements. ACI also completed the Bentomat material and protective cover material installations.

Apollo Steel Corporation (AS) - AS was hired to complete the construction of the treatment building structure including the interior wiring.

John W. Danforth Company (JWD) - JWD was hired to complete the mechanical construction and treatment system installation. This included interior and exterior piping and setting all mechanical equipment.

<u>Ferguson Electrical Construction Co., Inc. (FE)</u> - FE was hired to complete all electrical work associated with the treatment system. This included installing a permanent power supply and distribution system, instrumentation and controls and all associated wiring requirements.

3.5 FIELD MODIFICATIONS

Modifications were made in the field during the installation phase of the soil remediation program. A list of the field modifications instituted are listed below. The completed Field Modification Forms are included in Appendix L. The forms describe the required modification and the rationale behind the change. None of the field modifications will adversely affect system operation.

FIELD MODIFICATION	DESCRIPTION	<u>DATE</u>
1	Well Installation Dewatering Production	10/20/93
2	Additional Split Spoon Sampling	10/26/93
3	Reduction of SVE borehole diameter sizes.	10/26/93
4	Increase well screen for AI wells by .5'	10/27/93
5	Stockpile contaminated soil in roll-off boxes	11/01/93
6	Backup operator	11/01/93
7	Redesign of PZ wells	11/01/93
8	Elimination of AI-71 and AI-56	11/10/93
9	Repositioning of wells	11/22/93
10	Redesign of wells in courtyard - eliminate AI-131, AI-133, PZ-96	01/03/94
11	Repositioning of wells	01/03/94
12	Use of flowable grout in Filter's building	01/13/94
13	Redesign of ex-situ cell outer walls (2'x2'x4' blocks)	01/13/94
14	Soil compaction in areas to be covered with Bentomat®	03/16/94
15	P&IDs P005, P006, P007 revised	04/12/94
16	Addition to VES monitoring trailer	03/25/94
17	Change of cover material to 1" ROC	04/13/94
18	Discharge pipe change	05/11/94
19	Redesign of wells VEW-23 and AI-47 to above ground	04/13/94
20	Removal of concrete pad excavated in southwest corner of Filter's building	04/12/94
21	Use of 90° elbows instead of 45° elbows	04/12/94
22	Relocation of well control panels	04/12/94
23	Electric conduit pull boxes	04/11/94
24	Bentomat anchor trench	04/08/94

25	Raising elevation of branch pipe - AI-61	04/13/94
26	Change duct size on vacuum blowers	05/03/94
27	Possible use of 2" ROC for backfill	not signed
28	Reposition of trenches in filter's building	02/14/94
29	Temporary installation to vent tank (T-801) through activated carbon filter	not signed*

McLaren/Hart is presently reconstructing the original tank vent line and will most likely rescind this field modification.

3.6 AS-BUILT CONSTRUCTION DRAWINGS

The as-built condition of the soil remediation/groundwater treatment system is documented in the drawings (attached separately). These drawings have been certified by a Professional Engineer licensed to practice in the State of New York. The field modifications have been incorporated in the drawings where appropriate.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

4.1 GENERAL

The Construction Quality Assurance/Quality Control Plan (CQA/QCP) submitted by McLaren/Hart to NYSDEC (October, 1993) provided a means to monitor the installation procedures and verify that the appropriate equipment and material was installed. McLaren/Hart implemented this plan to insure the soil remediation/groundwater treatment system was installed to meet the intended operating and remediation goals. Key McLaren/Hart personnel associated with this work were identified in Section 3.2. Their specific roles and responsibilities were previously delineated in the CQA/QCP submittal to the NYSDEC.

4.2 TESTING AND SYSTEM CHECK-OUT

Tests were completed on the system components during the installation phase of various systems. The test data for physical analysis conducted on material samples is attached in Appendix C. Mechanical equipment and electrical instrumentation was checked after installation was completed. The test data for physical analysis conducted on electrical instrumentation will be provided by the Subcontractor and submitted under separate cover for insertion into Appendix C.

Specific testing and system check-out for specific construction activities are described in the following sections.

4.2.1 Groundwater Extraction Wells

During October 18 through 29 of 1993, a McLaren/Hart Hydrogeologist observed the installation of the two (2) groundwater extraction wells (PW-1 and PW-2) and associated equipment. The

well installation logs are included in Appendix E. Soil cuttings generated during drilling were monitored with a HNu for total VOC concentration and measurements were recorded on the standard McLaren/Hart air monitoring log sheet (Appendix F). Contaminated cuttings containing elevated concentrations of VOCs were placed in appropriate roll-off boxes and subsequently disposed of at The Chemical Waste Management (CWM) Model City Landfill Facility. Auger depths, water levels and well construction details were documented by the Project Hydrogeologist. The on-site Project Engineer observed the installation of the groundwater extraction well pumps, temporary piping and well controls and permanent piping and well controls.

4.2.2 Groundwater Extraction Well Piping

Installation of permanent well piping and controls were observed by the Project Engineer. The placement of underground piping was checked for adequate bed material, depth of piping below frost line and proper compaction of backfill material. All design criteria were observed to be met in the field. Following pipe installation and partial backfill, the pipe was hydrostatically tested by the installer following manufacturer's recommendations and conforms to design specifications. The Project Engineer recorded the results for the hydrostatic pressure testing which are provided in Appendix C.

4.2.3 <u>Vacuum Extraction Wells</u>

Installation of eighty (80) vacuum extraction wells was observed by McLaren/Hart. Three split spoon samples were collected from each well and monitored in the field with an HNu. Placement of the well screens were adjusted as necessary based on the field screening results. During drilling, auger depth, water levels, VOC concentrations, and well construction details were recorded by McLaren/Hart. Well installation logs are attached in Appendix E. Following well installation, head space measurements were collected on all split spoon samples with a HNu and

data collected are provided in Appendix D. The locations of the vapor extraction wells is shown in Drawing No. M015 (attached separately).

4.2.4 Air Injection Wells

Installation of one-hundred sixty two (162) air injection wells were observed by McLaren/Hart. During drilling auger depth, water levels, VOC concentrations and well construction details were recorded by McLaren/Hart. Well installation log sheets are presented in Appendix E. Screen depths were adjusted as necessary so the screen was placed above auger refusal. The locations of the air injection wells is shown in Drawing No. M017 (attached separately).

4.2.5 Pneumatic Piezometers

Installation of one-hundred fifty five (155) pneumatic piezometers were observed by McLaren/Hart. During drilling auger depth, water levels, VOC concentrations and piezometer construction details were recorded by McLaren/Hart. Piezometer installation logs are presented in Appendix E. McLaren/Hart adjusted the location of sample port inlets as necessary depending on depth of auger refusal. The locations of the piezometers is shown in Drawing No. M016 (attached separately).

4.2.6 Cover System

The Project Engineer coordinated and observed the regrading of areas where the low-permeablity cover was placed to ensure that the surface was acceptable for geocomposite placement as per the manufacturer's recommendations. In addition, the Project Engineer observed and recorded the placement of the geocomposite (i.e., Bentomat®) material and the cover material. A manufacturer's representative was onsite during the initial day of geocomposite material

placement. The Project Engineer observed the width of overlap between adjacent strips of the geocomposite material and the fitting of the geocomposite material around well heads to ensure the cover system was installed as per the manufacturer's recommendations.

A total of 139,500 square feet of Bentomat® liner was installed (including overlaps) and a total of 3,173 tons of stone was placed over this low-permeability liner material. Asphalted areas were sealed by spraying standard road sealant material.

4.2.7 Soil Vacuum System Piping

Installation of the soil vacuum system piping including the installation of piping, fittings, valves, heat tracing, insulation and trenching (where necessary) was observed by the Project Engineer. All main pipe runs installed aboveground were heat traced and insulated. All below ground piping was observed for adequacy of bed material, depth of pipe to ensure placement below the frost line and proper backfill procedures. All pipe installed inside the Filter's Building was pneumatically tested by the installer and observed by the Project Engineer. Pneumatic testing of the vacuum pipe was recorded by the Project Engineer and is presented in Appendix C. Heat tracing was tested by the installer and observed by the Project Engineer.

4.2.8 Treatment Building

McLaren/Hart observed the backfilling and compaction of the treatment plant footings and foundation. Troxler testing by the CQA laboratory was performed on the treatment plant subgrade and backfill around the foundation. Results of the troxler tests indicate the required compaction was obtained and these are presented in Appendix C.

The Project Engineer observed the construction of formwork, reinforcement of the concrete foundation, and placement of the concrete. The Project Engineer collected three (3) concrete

cylinders for each placement. One concrete specimen was tested by the CQA Laboratory, (Empire Soils, Inc.) at 7 days and one at 28 days for compressive strength. The results are presented in Appendix C and indicate the required compressive strength was obtained for all samples. Heating, plumbing and electrical work were installed as required during structural concrete installation and were certified according to the appropriate national and local building codes. Documents showing certification are presented in Appendix A.

The coarse aggregate used in constructing the access road and service area was compacted with a smooth drum compactor by ACI and visually inspected by the Project Engineer for stability.

4.2.9 Groundwater Treatment System

The Project Engineer visually inspected all groundwater treatment system equipment prior to installation. Installation of equipment and associated piping, valving and fittings was also observed. Testing on the mechanical equipment included confirmation of the rotation of the pump and blower motors, as well as the frequency and alignment of pumps. Testing conformance to performance curves was conducted by a vendor representative and observed by the Project Engineer. Equipment start-up and pump check-out reports prepared by vendor representatives are presented in Appendix M. Air stripper packing installation was visually observed for proper random alignment by the Project Engineer.

All tanks and other vessels were hydrostatically tested with potable water prior to placement into service. In addition, all groundwater treatment piping was hydrostatically pressure tested by the installer and observed by the Project Engineer. Hydrostatic test results are presented in Appendix C. ASME stamps and specifications for all pressure vessels are located directly on the vessels in the plant.

Initial operation of the liquid phase system was completed, utilizing potable water, to insure system integrity and proper operation prior to treating impacted groundwater. The system has been operated for over three months with performance as designed.

4.2.10 Vapor Extraction Treatment System

The Project Engineer visually inspected all vapor extraction treatment system equipment prior to installation. Vacuum lines were not leak tested and are subject to manufacturer's warranted operation. Leaks in vacuum lines would be towards the interior of the pipe during operation and are not believed to be crucial. The piping is rated to operate at the projected vacuum levels. Installation of equipment and associated piping, valves and fitting were also observed. Testing of the mechanical equipment included confirmation of the blower motors, pump motors rotation, and operation of the air compressor. Testing conformance to performance curves was conducted by the vendor representative and observed by the Project Engineer. Equipment start-up conformation, prepared by the vendor representative, is presented in Appendix M.

4.2.11 Ex-Situ Treatment Unit and Soil Staging Area

The Project Engineer and the Electrical Engineer inspected the subgrade preparation for proper installation of the geomembrane liner and cover, the installation of the geomembrane and cover material, the placement of the 2'x2'x4' concrete blocks. The Project Engineer supervised ACI on the method to build the cell and on the location of piping inside the cell. The Project Engineer supervised the installation of the piping in the cell, the loading of soil into the cell, and the covering of the loaded material.

The quantities of soil requiring treatment in the ex-situ cell were reduced during construction by utilizing excavated soils generated during trenching for general backfill and by HNu screening. The final cell measures approximately 56.25 feet by 63 feet and holds an estimated 480 cubic yards.

4.2.12 Instrumentation and Control

The Project Engineer and the Electrical Engineer observed the installation of the instrumentation and controls. Wiring and instrumentation installation was systematically checked to insure proper termination of the wiring and operation of the instrument. Instrument calibration was conducted by the installer and observed by the Project Engineer prior to start-up. Calibration sheets will be provided by the installer and submitted under separate cover for insertion into Appendix C. The control system programming was run through all known working alarm conditions to test the ability of the control system to perform properly. This included start-up, shut down, high and low flows, pressure and temperature readings. The system programming was modified to meet design requirements during start-up.

4.3 CONSTRUCTION REVIEW

An initial construction review was conducted in conjunction with initial start-up activities which began the week of May 23, 1994 and were completed on June 17, 1994. During that time, the various systems and their components were inspected for proper installation and tested for proper operation. The result of the initial inspection and testing confirmed that the system was constructed and operating as intended in the design. The certifying Professional Engineer conducted a field inspection on July 13, 1994 and has certified that this report and as-built drawings represent the as-built condition of the system. Subsequent inspections were completed as additional construction activities were completed during August 1994.

4.4 OUTSTANDING CONSTRUCTION ITEMS

Several outstanding construction items were identified by BP during June and July 1994, none of which impeded the projected schedule of the remediation program. Construction was completed on August 9, 1994.

4.5 CORRECTIVE ACTIONS

Minor corrective actions were necessary during the start-up phase to fine tune the programming and repair deficiencies identified through testing procedures. The required corrective actions were completed and the system is operating as anticipated. These items were noted in start-up logs contained in Appendix N.

5.0 PROFESSIONAL ENGINEERING CERTIFICATION

I, Vincent S. Wroniewicz, a licensed professional engineer in the State of New York, certify that I, and persons under my supervision, have made visual inspections for the Soil Remediation/Groundwater Treatment Project, Carborundum Facility, Wheatfield, New York and that construction has been prepared and constructed in accordance with the following:

- Document titled "Soil Remediation Program/Groundwater Treatment System Work Plan, Carborundum Facility, Wheatfield, New York", dated October 6, 1993;
- Document titled "Mechanical Specifications Soil Remediation/Groundwater Treatment Project for B.P. Oil Carborundum Site, Sanborn, New York", dated January 1994; and
- Drawings titled "Soil Remediation Program/Groundwater Treatment System Work Plan, Carborundum Facility, Wheatfield, New York", dated October, 1994.

With the extent of work being certified and any changes or clarifications to this certification as described in this report. All documents referenced above were prepared by McLaren/Hart Environmental Engineering Corporation.

Additionally, I certify under penalty of law that I have personally examined, and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Vincent S. Wroniewicz, Jr.	10/11/94
Printed Name	Date
William Ja	STATE OF NEW PORT
Signature U/	WRONGING F
NY 045654-1	
Professional Engineering License Number 131 North Third Street Philadelphia, Pennsylvania, 19106-1903	
Business Address	PROFESSIONAL HUME
215-627-4505	AOVESSION IN
Telephone Number	(seal)

(BP\0801056\R006.BDR)



TOWN OF WHEATFIELD Nº 1558 NIAGARA COUNTY

CERTIFICATE	OF	OCCUPANCY/USE
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•						JUNE 14	ASSA / CONTRACTOR HOSpector

PERMANANT DRAINAGE EASEMENT AND THE TOWN RESERVES THE RIGHT TO MAINTAIN SUCH EASEMENT

POST THIS PERMIT ON STRUCTURE

TOWN OF WHEATFIELD BUILDING	D BUILDING PERMIT
TOWN OF WHEATFIELD BUILDING INSPECTOR 2800 CHURCH RD., N. TONAWANDA NY 14120 694-6440	NDA NY 14120 694-6440 CALL — Foundation Insp. CALL — Foundation Insp. CALL — Insulation Insp.
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n accordance with plans and specifications submitted. Cost \$	ns submitted. Cost \$

Health, relating to the construction of buildings; that the obligations of the owner set forth in the application herefor dated of said laws, ordinances, rules, regulations, or obligations, this permit may be revoked and the Town may also pursue any and all shall, by said owner, be promptly and faithfully fulfilled; that upon the violation of any legal and equitable remedies afforded it.

This permit is granted on the following express conditions: that the owner and his agent shall in all respects conform to the

laws of the State of New York, the Ordinances of the Town of Wheatfield and the rules and regulations of the Town Board of

This permit has been approved by the Town Bookra

Fee Paid.

THIS PERMIT SHALL EXPIRE

Signed: ...

BUILDING INSPECTOR

シアンス さいかんりょく カンス

REMARKS CONTRACTOR OF THE

Plbg. Contractor	NIAL PIDING.
Address	NRB CORY DR.
Underground Da	ate
Rough In Date	JAN 6-94
Inspector <u></u>	, Gm
Remarks: Po	usu Passep

Ray Camann
Plumbing Inspector
Town of Wheatfield

Plbg. Contractor NIACARD GIPIAL

Address CRY OR
Underground Date DEC 9-93

Rough In Date Inspector NIACARDUDO PASSED,

Ray Camann
Plumbing Inspector
Town of Wheatfield

A CCOOCOOO

TOWN OF WHEATFIELD, N. Y. APPLICATION FOR A PLUMBING PERMIT

This application becomes a plumbing permit when signed by the Plumbing Inspector and/or Secretary.

I do hereby make application for a permit to do plumbing work as set forth in this application. All work will comply with the New York State Building Code pertaining to plumbing and all Town of Wheatfield Local Laws pertaining to plumbing, sewer, excavations and other related areas.
PLUMBING CONTRACTOR Robert PARKHILL License No. 34-
Address where work is to be performed: CORY DR 2050 OWNER B-P AMERICA CARBO-WHEATFIELD
NAME OF BUILDING CONTRACTOR
Work to be performed on: New Construction Remodel
Type of Building One Family Two Family Multi-Family
Commercial Industrial
In other than one and two family dwellings a plumbing mechanical print and specifications shall be submitted with application.
DOWNSPOUTS AND GUTTERS AND CONNECTIONS FEE: 100.00
FEES: Residential/new construction Residential/remodel permit SD 35.00 + 2.00 p/fixture each additional unit 20.00 P/unit + 2.00 p/fixture
Commercial or Industrial/new construction permit 50.00 + 3.00 p/fixture Permit 25.00 + 2.00 p/fixture (1st 100 fixtures 3.00 each, all others 2.00 each)
INSPECTIONS: First three (3) inspections - cost is in initial fee. All additional inspections are \$15.00 each, either residential, commercial or industrial.
LIST FIXTURES and numbers of each: Number of fixtures $\frac{4}{}$ Cost: $\frac{12}{}$ Basic rate: $\frac{50}{}$ TOTALS \$ $\frac{62}{}$
OWNER'S-PLUMBER'S SIGNATURE Bouth Buthill
This permit authorizes plumbing to be installed at the above address as described in this application
Permit No: 1920
Date: 11-15-93

Plumbing Inspector, Town of Wheatfield Secretary,

RECEIPT Date Man. 15, 19 93 No. 9536

Received From Robert Paubhile

Address

One hundred sixty-two & NO/100—Dollars \$ 162.00

For Ilby permit # so 1920 @ 2050 Cory Dr.

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NEW YORK STATE QED 1 4 1993 DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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DEPARTMENT OF ENVIRONMENTAL CONSERVATION NEW YORK STATE

R E CROCKS, TEXHAUST OR VENTILATION SYSTEM UNIT OR PROCESS DATA

COPIES

WHITE - ORIGINAL
GREEN - DIVISION OF AIR
WHITE - REGIONAL OFFICE
WHITE - FIELD REP YELLOW - APPLICANT

NOITE ST

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102

UNIT LD

PLEASE PRINT OR TYPE

かんなん SOURCE HRS/DAY DAYS/YR 24 365 2 5 2 5 2 5 2 5 180. % OPERATION BY SEASON Spring Summer Fall

1		_	<u> </u>		
	7	ON ON	PROCESS	181	
	stripping system will be 3208 scfm. The air will be treated in	į įu		Contaminated groundwater containing 3 mg/l of total volatile o	
	stripping system will be 3208 scfm. The air will be treated in a carbon absorption unit. The spent carbon will be recycled off-site.	to the second tower for polishing. The air emission rate from the air	ping system. The water will flow into the top of the first tower at 400 gallons per minute (gpm) and down through a packed bed, while	Contaminated groundwater containing 3 mg/l of total volatile organic compounds (TVOC) will be treated through a dual column air strip	

<	C M	S
18.5	182 01	EMISSION CONTROL CONTROL EQUIPMENT I.D. TYPE
189	17	CONTROL TYPE
90	Calgon Carbon Vapor Pac-10	MANUFACTURER'S HAME AND MODEL NUMBER
191	9	DISPOSAL METHOD
192. /	10 / 93	INSTALLED
193	2	USEFUL

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	4.		ယ		?		-	٥
	4. Therefore: TCE = 0.60 lb/hr, C1s = 0.024 lb/hr, Yiny1 Chloride = 0.006 lb/hr	sin hr 35.31 ft	3. Wass Loading Rate = 3208 ft 60 min 1 m 2.2 x 1	•	2. Air Concentration TVOC = 4542 mg 1 min 35.3 ft	0.2642 gal / win 1372 mg/min	1. 3 mg 1 1 400 gal	CALCULATIONS 3 mg/1 TVOC is transferred to 3208 scfm of air. Groundwater flow rate is
	ride = 0.006 1b/hr	day mg day mg hr	2.2×10^{-1} $24 \text{ hr} = 2.88 \times 10^{-1}$ $3 \text{ lb} = 1.2 \times 10^{-2}$ 3 lb	TO MAN OF THE THE TENT TO MAN OF THE	$35.3 \text{ ft}^2 = 40.00 \text{ mass}^3 \text{ of which 47 A9 ms/m}^3 = 100.2 \text{ MB ms/m}^3 = 010.0 \text{ MB ms/m}^3 = 100.00 $	IS Vinyl Chloride		400 gpm. TVOCs = 9
Methylene Chloride	Trichloroethane Carbon Tetrachloride	Hydrocarbons way include:	Miscellaneous Chlorinated		$3 = 0.50 \text{ mg/m}^3 = \text{Vinvi Chiorida}$	iloride	4% Cis-1,2-Dichloroethylene	wethylene,

		ź	0	`	•	7	3	IJ	ς		
))		c. Chiorinated Hydrocarbons	230	Yinyl Chloride		Cis-1,2-Dichloroethylene		Trichlorethylene	04	NAME	CONTAMINANT
255	ī	1476-29-1	231	75-01-4		540 59 0	207	79 - 01 - 6	195	CAS NUMBER	
256	244		232		220		208		96	PRODUCTION	RPUT
257	245		233	į	22		209.		197	9	
258	246	trace	234	1.00/	222	1	210	9.66	40.	ACTUAL	SIM3
259	247	46	235.	-	223		211	—	199	UNIT	EMISSIONS
	1				_						
260	748	5	236	9	224	an an	212	9	8	DECA	
260. 261	248 249	6 90	236 237	<u></u>	224 225	6 90	212 213.	90	200 201	DET EFFICIENCY	control
. .	249		237 238	90	225 226		213. 214.	6 90 0.60	201 202	DET EFFICIENCY ERP	\dashv
261	249 250	trace	237	98	225	90	213.		201		HOURLY EMISSIONS (LBS/HR)
261 262	249 250 251	trace trace ++	237 238	6 90 0.006	225 226	90 0.024	213. 214.	0.60	201 202	ERP	\dashv



NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

RECEIVEND OR PROCESS DATA PROCESS, EXHAUST OR VENTILATION SYSTEM

PLEASE PRINT OR TYPE

WHITE - ORIGINAL
WHITE - REGIONAL OFFICE

COPIES

POINT ID

UNIT I.D

YELLOW - APPLICANT WHITE - FIELD REP

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N.Y.S. DEPT, OF CONTICAL CONTICAL STREET OF CONTICAL CONTICAL STREET OF CONTICAL CON

177 2219 SOURCE HRS/DAY 24 DAYS/YR 365 Winter 180. % OPERATION BY SEASON 2, 5 2, 5 2 5 2 5 2 5 Spring Summer Fall

< 0 m/s			7	0	W (<u></u>	
22	60	182 01	EMISSION CONTROL CONTROL EQUIPMENT 1.D. TYPE			PROCESS	161
14	189	17	CONTROL TYPE	1587	5. pad	3 trea	So:1
Demistag	190	Galgon Carbon Vapor Pac-10	MANUFACTURER'S NAME AND MODEL NUMBER	1587 cfm of atmospheric air will be added (TVOC = Oppm). An additional carbon unit will be used for treatment. Spent carbon will be	pad_will be used to separate the vapors from the water. The wapdrs will be processed through blowers, after which an additional	treatment cell. The total flowrate will be 1058 cfm. Collected vapors will initially go to an air water separators, where a demister	Soil vapors containing 100 ppm total volatile organic compounds (TVOC) will be collected from 78 extraction wells and an ex situ
0	191	185.	DISPOSAL METHOD	dditiona	vapors 1	ted vapo	ds (ÎVO
10/95 2	192 /	10 / 93	DATE INSTALLED	l carbon unit	dll_be_proces	rs will init) will be co
X	193	187	LIFE	will be	ssed thro	ially go	llected f
			recycled off-site.	used for treatment. Spent carbon will be	ugh blowers, after which an additional	to an air water separators, where a demiste	rom 78 extraction wells and an ex situ

Wass Loading Rate = 2645 ft³ Therefore: TCE = 38 ppm = 207.86 mg/m³ Cts-1,2-DEC = 1.6 ppm = 6.45 mg/m Vinyl Chloride = 0.38 ppm = 0.99 mg/m ₹ 35.31 ft³ 2.2×10^{-6} lb 3 9.89 x 10⁻³ 1b m³ mg hr Therefore:

1. Addition of atmospheric air to stream: (1587 cfm) (0 ppm) + (1058 cfm) (100 ppm) = (2645 cfm)(x); x = 40 ppm TVOC

TYOCs = 100 ppm of which: 95% = Trichloroethylene, 4% = Cis-1,2-Dichloroethylene, 1% = Yinyi Chloride

M

CALCULATIONS

25

₹ 0

TCE = $(207.86 \text{ mg/m}^3)(9.89 \times 10^{-3})$ = 2.06 lb/hrDCE = $(6.45 \text{ mg/m}^3)(9.89 \times 10^{-3})$ = 0.063 lb/hrVC = $(0.99 \text{ mg/m}^3)(9.89 \times 10^{-3})$ = 0.009 lb/hr

	7	* (0 -	7 (، نی ر	'n	
.54	47	2 30	Vinyl Chloride	Cis-1,2-Dichloroethylene	Irichloroethylene	NAME	CONTAMINANT
255	243	231	7 5 - 0 1 - 4	540_59_0	195 79 01 6	CAS NUMBER	ANT
256	244	232	220	902		PRODUCTION	INPUT
	245	233	221	602	197	9	TIME
258	246	234	1.00/ 1.000	1.063 1.066	306	ACTUAL	EMISSIONS
259	247	235	223	—	199.	TINU	SIONS
260	248	236	224. 55	o	6 2	DE H	
261	249	237	225 90	90	90	EFFICIENCY	CONTROL
262	250	236	0.009	.063	2.06	ERP	HOURLY EMISS
263	251	239	0.001	0.006	0.206	ACTUAL	HOURLY EMISSIONS (LBS/HR)
264	252	240	7.88	55.2	1804.6	ACTUAL	ANNUAL EMISSIONS (LBS/YR)
265	253	241	0	0	205	10 %	(נאג/ץ)

114
Mc <u>laren</u> Hart

DAILY FIELD ACTIVITY LOG	DAILY	FIELD	ACTIVITY	LOG
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	PROJECT NAME:	BP America	DATE:	2-4-94
Mclaren Hart	PROJECT NO.: PREPARED BY:	BP America 090801056 RC Backen	PAGE	1 OF _ こ
PROJECT DESCRIPTION	n: _ SUE syste	2a		
WEATHER CONDITIONS	: hice Summer	y barm		
SITE CONDITIONS:	day			
PERSONNEL ON SITE:				
OTHER: Forguson	. , N+ A			
EQUIPMENT IN USE:			•	
CONTRACTOR:				
SPECIAL ORDERS / I	FIELD CHANGES: _			

ili.



DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America DATE: 6-4-84 PROJECT NO.: _09080/056 PAGE ____ OF ___



	PROJECT NAME:	BP America	DATE:	6-3-94
Mc <u>laren</u> Hart	PROJECT NO.: PREPARED BY:	090801056 Kr Barken	PAGE . 	1 OF
PROJECT DESCRIPTION	VI SVE Syel	(r		
WEATHER CONDITIONS	MICK SOA	AV 70°		
SITE CONDITIONS:	and de		·	
	2001 01.5			
PERSONNEL ON SITE: HART: To Delisia		pr. Donforth Fergus		
EQUIPMENT IN USE:				
CONTRACTOR:		·		
PECIAL ORDERS / FIE	eld changes:			



PROJECT NAME: BP America

PROJECT NO.: 09080105% PREPARED BY: RC Becken

DATE: 6-03-94
PAGE 2 OF 2

ACTIVATION of
ACTIVITIES: - Ferguson working on Dust + Dw2 also on man control
the state of the state of the
Donforth working on the country on the of also had two man
the track is to find the first to be and the
were filled with potablable water. Next to pumps 803 B, B.C.
with the season purped water, 505 A pumped water
The state of the s
Control State of the state of t
the the there are the there
with prtable water. I granter where felled)

MA
Mc <u>laren</u> Hart

PROJECT NAME: 39 America DATE: 6-02-94 PREPARED BY: RC Bester PROJECT DESCRIPTION: SVE system WEATHER CONDITIONS: windy, cool, overcant cleaning in afternoon SITE CONDITIONS: draining PERSONNEL ON SITE: HART: Bob Delines, Rick Becken OTHER: NA, DEC, Donfoth, Cerrore, Ferginson EQUIPMENT IN USE: HART: _ rome CONTRACTOR: nood broom backhoe SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME: BP America DATE: 6-02-14 PROJECT NO.: 07050.056

PREPARED BY: RCBecken

PAGE _ _ _ OF _ 2_

ACTIVITIES:
Cerrore per 2. 0 the
Cerrore speled the powerent ones in the contaminated some today this was done on a lan our of 5000 which included
the material the truck I am a
there was enough to
heavy costs plus a trail and
the ofte ending at to 10th 1 711 and the sent such of
repair of the bentomet by Hall to a love was the
the operator two laborers and one france worked on that six hours
to complete. Common demolia attin Discharge That six hours
this oftenoor as the
some grading around the treatment of
when we tre in the GWS to the total when it gets dries and
Jerguson is working on the and a Call
main control panel, the sumps were bunged and the
notation today also. Farguson dels that
work part of the day on Saturday.
Darloth completed the set to
stupper towers were felled and Plant also done was the sin
stupper towers were felled and PWI as had the notes controlled
value intolled and the flow mater Tomorow they will de the
Some with exception for the pine in the A dams now says all the work will be
Some with exception for the pipe involution by next Friday possibley
somer.

114
Mclaren Hart

	PROJECT NAME:	SP America	DATE: <u>6</u> -	1-94
Mclaren Hart	PREPARED BY:	09080156 RCBecker	PAGE1	OF <u>~</u>
PROJECT DESCRIPTIO	N: _ 50E sypt			
WEATHER CONDITIONS	s: cool windy	overcast then per	***	
SITE CONDITIONS: _&	14.X			
PERSONNEL ON SITE: HART: B Delian	» R. Becken			
OTHER: MAA DE	C, Domfortu	+ Ferguson		
		/		
QUIPMENT IN USE:		·	·	
ONTRACTOR: _to.kl	st, was from	·		
PECIAL CONTROL / ST				
Ten 2 onoch3 / File	CHANGES:			



PROJECT NO.:

PROJECT NAME: BP America DATE: 6-1-94 090801056 PREPARED BY: R.C. Becker

PAGE 2 OF 2

Howtorth otiel working in the building Utipa Pac 103 al 1430 to move the Vapor Par they



PROJECT NAME:	BP America	
	OFORDIASI	DATE: 5/31/94
REPARED BY:		PAGE OF

Trucking pecked it up at 1000.
Touch said it to the was standed out and Tagain
Tourse french dup at 1000.
Tenguam Edection working to exterior panels boxes for GWS
Lenguage personnel worked entil 1730 today. The transformer in the power rotation has not not been contacted and everyone.
blet as now saying it will be done first the tomoris morning.
The second of th
be a public to because serguson is betain but Denforth make ofthe
The beauty the beauty
are working in the court yard od in the builder
come o crew awas cut back to we man of
and portugat a finished laying the remaining government in the west
otanted steering the pavenent for send of the survey pipe won replaced and then
started allowing the favour of for scaling.

114	
Mclarer Hart)

PROJECT NAME: BP America DATE: 5-31-94
PROJECT NO.: 090801056 PAGE 1 OF 2-PREPARED BY: P.C. Bicken PROJECT DESCRIPTION: SUE system WEATHER CONDITIONS: windy overcast tain late in the afternoon SITE CONDITIONS: _____ PERSONNEL ON SITE: HART: ____ R. Becken, B. Delisio OTHER: HOR DEC, Danfortz, Ferguson EQUIPMENT IN USE: HART: Worle CONTRACTOR: backhoe SPECIAL ORDERS / FIELD CHANGES:

2.	
MCIarer Hart	7
PROJECT DESCRIP	

Mclaren Hart	PROMELLI NELI	BP America 090801056 RC Becken	DATE:	5/27/94 1 OF 2
PROJECT DESCRIPTION	1: _ SVE su	1 stem		
WEATHER CONDITIONS:	: clear, su	mu, cool		
SITE CONDITIONS:	ret			
PERSONNEL ON SITE: HART: J. Craig T	Bob Deliain 5	Kalsa, L. Nielson		
OTHER: NAA, Cerron	e, Danfoth,	Ferguson		
EQUIPMENT IN USE: HART: <u>Bento Mat</u>	negging			
CONTRACTOR: back				
PECIAL ORDERS / FIEL	D CHANGES:			



		. 104	
PROJECT NAME:	BP America		
PROJECT NO.	090801056	0	ATE: 5-27-94
PREPARED DV	RC Becker	Р	AGE _ Z OF Z
WE WEED BI:	- K Secker		

ACTIVITIES:
Cerrorie crew laid Bents Met in the south east corner this is the final area to be covered also done by Cerrone at the same time was continuation of peop work for the asphalt in Darforth works as the
same time was sail to
the west area
Darloth wohis
overhead done I have the large duct work near the
Darforth working on the honging the large duct work near the overhead doors and the installation of the associated stack. This was done by the end of the day. Also there was two men working on the giping in the country of.
on the arm of the
Ferguson Inishe O port
to do the initial tester it landone and its all set
Ferguson Smished hooking up the transformer and its all set to do the initial testes if we had given which we don't because
a tendorme in the gul states the Hash was abounding out
send the man who come is to tit to the
at mon today we found out that Nick - Mash was about the at the former out of the man who come is to test the thingh pad have become of this screw up.
The Vapor Pac 10 units were delivered today on soll of treibro much to long to get back to the building so we had to off lood
much to long to get back to the builder on roll of trailers
BFC or some other truckers small in al we'll have to get
BFC or some other trucking company in to want to get
BFC or some other trucking company in to move them into the
now his appr. 25' of trench to finish is the west one he could be done
couth east and their he will be done

1114
Mclaren Hart

DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 09 080:056 PREPARED BY: RC Becken	DATE: <u>5/26/94</u> PAGE <u>1</u> OF <u>2</u>
SVE system	
rain overcast cold	
Delisto, J. Craig R. Becken	
errone, Donforth, Ferguson,	
	•
	k
CHANGES:	
	PROJECT NAME: BP America PROJECT NO.: 09 080:056 PREPARED BY: RC Becken SVE system Aaim overcant cold



PROJECT NAME: BT America DATE: 5/26/94
PROJECT NO.: 090801056 PAGE 2 OF 2
PREPARED BY: RCBecken

ACTIVITIES:	
Canone working	e main entrance and the east
area on the	e main entrance near the gate alin the
area area with	I the gall a little
-10-12 the weather	truet building diverson to finish and exper.
- March 174	a little 1100 and 11 into
- Muller Mariner.	July William To The Total Transfer of the To
half to	store degging the trench we had to stop only store the pass (lighther thunden) we tall
treach was seed	for book filling shorten delose live fiftees. The
scarton worked	i the t
the four line in	in the treatment building al placed the
- Krauson worked a	- the training about.
Carried building	Distantance and the parel boards inside
lockerer at the end of	that we would need I less mente
Danforth (Ron Rengo	tout toutrous
S IN THE STATE OF	there out 7
1 Hill &	they could work this Saturday of called Dave Hangan
such she short it	den could work this Saturday of called Dave Hangan tie or if we could be come on Set on
, his compact	work with put the
get back to me by	Tonours).
U	

MA	
Mclaren Hart	

Mclaren Hart		BP America 090801056 R.C. Becken	DATE: PAGE .	5/25/44 1 OF 2
PROJECT DESCRIPTIO	N: SVE sys	tem		
WEATHER CONDITIONS	s: _overcast	wasm		
SITE CONDITIONS:	dry			
		raig, Ro Becken Cerrone		
EQUIPMENT IN USE:				
CONTRACTOR: back	hor (2), D-3 o	lorer, plate tomper	dump true	k.
SPECIAL ORDERS / FIE	ELD CHANGES:			



2.1111	FIELD ACTIVITY LOG	
PROJECT NAME:	BP America	
PROJECT NO.:	090801051	DATE: 5/25/94
PREPARED BY:	R C Becken	PAGE _ 2 OF 2
	s and a	

ACTIVI:	
401	Dunforth working on the air streppen piping in the builder a
tu	- Dangath employee) 1 4
_	the ted to de a contint space and
770	a veckus to Dandate
-the	to work on the
	on mee.
for 1	our to the test of
Pare	a second second
gra	der was I to the operator spend the It
hind	to do her is the last and
shoul	
Ao	per Don Grand what we shouldn't
calcu	per Don Largohaws request a yesterday of measured and
it t	2 10 300 to 1 both in the ex. T. 100 0
	Sue Boule 11/10 measurements of 52' x 59' x 3' may 1 of 51
the d	enter look of the everything from the different again to
Onta	ite looked very good, represented justenday was NY DEC US EPA
	Candin Munitary of the Face
	(monarant.
•	
,	



DAILY	FIELD	ACTIVITY	IOC
-------	-------	----------	-----

Mclaren Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America 090801056 R C Becken	DATE: PAGE	5/24/94 1 OF 2
PROJECT DESCRIPTIO	N: <u>SVE syste</u>			
WEATHER CONDITIONS	: wasm, ove	ercast springling,	rom	
SITE CONDITIONS:	dry			
PERSONNEL ON SITE: HART: J Craig OTHER: BP NAM		· Becken ierrone, Danfartz,	Ferguson	
QUIPMENT IN USE:	rigging		•	
CONTRACTOR: _backb	we, Cat 225	·		
PECIAL ORDERS / FIE	LD CHANGES:			



PROJECT NAME: RP America DATE: 5/24/94
PROJECT NO.: 09 080/056 PAGE Z OF Z
PREPARED BY: RC Recker

ACTIVITIES:
Cerrone started the day to see the
Cerrone started the day by redoing what Sevenon didit do lost night. Sevenon what grade the north area properly
to lay the kent of a find the north are
the concrete back of 11
the end of the de 10
bokes in the worked on the
and three concrete to 10 1) grant and stare from the
Danforth worked is the treatment builting al in the court yard
pipings the contyand
The state of the s
good, Higgins was used to place the transformer. Don Langahan 1 BP mut
100 Langaha A RD
I told her the
was either to test to
been danaged by the road broom is to
the night + left side of the can from the Lit of greater how
been danaged by the road brown yesterday I all in question how the right + left side of the car from the front end of the door to the rear of the can could be shaped but not the front end or the on eith fund you the can was backed in) a local or the
winded in Die and not damased either also the two cans
hovol??? Brian halus is checking with fler Opalla on whether such as this if we are insured by an usurand company them a local agait, cold come out to the ate and check it out.
such as this if we are insure of I. confam harles problems
local agait could come out to the late of a company them a
in sheet it out.



Mclaren Hart		BP America 090801056 RC Becken	DATE: PAGE	5-23-94 1 OF Z
PROJECT DESCRIPTION	V: _ SVE syste			
WEATHER CONDITIONS:	nice sunny, a	Sarm		
SITE CONDITIONS: 90	od, dry			
PERSONNEL ON SITE: HART: J. Crarg, B. OTHER: R. HAA		Ker Forth Ferguson		
EQUIPMENT IN USE: HART:			•	
SPECIAL ORDERS / FIEL		road sweeper		



PROJECT NAME: BP America

PROJECT NO.: 09080 1056

PREPARED BY: RC Becken

DATE: 5-23-94

PAGE 2 OF 2

Cerrone on cite this morning gregaring the trender in the west area for repairing taping seems on the existence cell even and remaining in a road from al sweep they paid diversary on all such that parted to do this he was there small stone al golist on the parted cain I have now have a Metallies imployed into a guite toright and we will look at possible paint chips tomorn. Sevense ailest finish grading in the rooth area around to 5PDES morning it would be done of storaged Cerrone from the iroad and to the hard banch one pass and VT ordered he would up the cardinard tube al other track from the act 30 yet both ple and in the site books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty mis. Cornone had an operation grading around the state books pretty are a book of courts will lives a lass of the finished the search area to Metallies office and stated laying out the page for the contributed.
in a road from al sweep the pared diversing on all with the brief stated to do this he was there small stone of a dist on the parked cais of we now have an Metathia imployee who is gitte toinght as we will look at possible paint chips tomound. Severson ailat finish gooding in the roath area around the 5PDFS morning it would be done of stopped Cerrone from the world would be done of stopped Cerrone from the world with a wall would be and one pass and VI ordered his world with and was folly morning the world to be and other trash from the act 30 yet box fell and want to the said one pass of the mother and to yet the around the said of the trash from the act 30 yet box fell and in a will took a will token the head him the said for the said and the said for a will token the head him the said around the said for a will token the head him the said around the trash from the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said and the trash for a will token the head him the said and the trash for a will token the head him the said and the trash for a will the said and the said
in a road from al sweep the pared diversing on all with the brief stated to do this he was there small stone of a dist on the parked cais of we now have an Metathia imployee who is gitte toinght as we will look at possible paint chips tomound. Severson ailat finish gooding in the roath area around the 5PDFS morning it would be done of stopped Cerrone from the world would be done of stopped Cerrone from the world with a wall would be and one pass and VI ordered his world with and was folly morning the world to be and other trash from the act 30 yet box fell and want to the said one pass of the mother and to yet the around the said of the trash from the act 30 yet box fell and in a will took a will token the head him the said for the said and the said for a will token the head him the said around the said for a will token the head him the said around the trash from the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said around the trash for a will token the head him the said and the trash for a will token the head him the said and the trash for a will token the head him the said and the trash for a will the said and the said
started to do this he was throwing small stones on I g diet on the parked cais of me now have an Methodlies employee who is give upset about promitle de age. I toel him to get his an washed toright and we will look at possible paint chips tomorn. Severson distant finish grading in the rooth area around the SPDES morning it would be done. I stopped cerrone from they would be done of stopped cerrone from they would be made one pass of VT ordered his would expected by the world with died a minigot. Modern disposed pushed with and touch take and other trash from the arte 30 yel box fell and in the saite books putty mise. Carrone had one operation grading around the worked in the teacher there had been been the form they would least for a will tolar them he had him Darfith worked in the teacher hulling cast of south will be and also the teacher there is a south will be and also the teacher there is a south will be and also the teacher there is a south will be and also the teacher there is a south will be and also and also the teacher there is a south will be and also and also the teacher there is a south will be and also also also the teacher there is a south will be and also and also the teacher there is a south will be and also also also and a south will be and also are the south and also and also also also also and also and also and also and also also also also also also also also
expect about possible durage. I toel him to get his can washed toright and we will look at possible paint chips tomown. Severson ailait finish grading in the worth area around the 5PDES outful to do a world be done. I stopped Cerrone from the world be done to stopped Cerrone from the isoal excepted to the interval and for Modern deposed puchel and the interval and to the interval to the interval did a min job. Modern deposed puchel with and board take all other trank from the site 30 yd bot fill amount on the world least) for a will take to a operation of and worked in the teast had the like the had him the worked in the teast build's east and anoth side.
Several possible durage. I told his to get his an washed toright and we will look at possible paint chips tomornow. Several silat finish gading in the north area around the SPDES outful bot po I will be done to stopped Cerrone from the townsom the world be done to stopped Cerrone from the world in sweeper to the site which did a min job. Modern disposed pucked my the card board tubes and other trash from the site 30 yd box fel world around the site books pretty mid. Convone had are operation around the saite books pretty mid. Convone had are operation and in the sweel (east) for a will tolar then he had him Darfoth worked in the teatment building cost and court side lines at a day to the teatment building cost and court side
Severson silat finish grading in the north area around the SPDES outfall bot so I could't lan Bentitet of was told by tomorrow morning it would be done. I stopped Cerrone from my the road covered to the interval one pass of VI ordered his would my the card board to the and other trash from the site 30 yd bot fill working on the site looks putting mice. Cerrone had one operator and in the world (east) for a will tolar the he had him Darfith worked in the teatment builting east all south site lines in a start worked in the teatment builting east all south site lines in a south site lines in a start worked in the teatment builting east all south site lines in a start worked in the teatment builting east all south site lines in a start worked in the teatment builting east all south site
outfall bot so I wall the Bent Mt of was told by tomorrow morning it would be done. I stopped Cerrone from my the world be done one pass and VI ordered his would my the ward touch and one pass and VI ordered his would my the card touch did a mis job. Modern droporal puched with and touch the and other trash from the arte 30 yd box fel working on the saite looks pretty mice. Comme had one operator and in the save (last) for a wille tolar them he had him the party around the the testing them he had him the worked in the testing there had been the lines of also the testing the life east all south side lines of also the testing the help for a will prove and a south side.
morning it would be done. I stopped Cerrone from injustional soul comments to the half somehome pass and VI ordered his world up the interval did a min job. Modern disposed puched this morning the site books pretty nice. Comment and organist for full works on the evaluation of the evaluation of the evaluation of the evaluation of the swale (last) for a write tolar them he had him the worked in the teatment builty east all south side lines of also told in the teatment builty east all south side
from often be had sample one paro and VT ordered his word except to the site which did a min job. Modern disposed pushed with and board table and other trank from the site 30 yd box fill working on the saite looks pretty mise. Comme bad are operator grading around the swale (east) for a worke today. Then he had him Darfoth worked in the teatment building east all south side lines and also the teatment building of a south side
sweeper to the site which did a min job. Modern disposed puchel with and board tube and other trash from the site 30 yd box fill working on the site books pretty nice. Conone bad one operator grading around the test of a write today. Then he had him Darforth worked in the teatment builtie cast and south side lines a Darforth worked in the teatment builties cast and south side
up the card broad tube and other trash from the site 30 yd box fel worker on the site books pretty nice. Comme bad are operator grading around the sevent for a while today then he had him Darfoth worked in the teafunt builtie east and south side lines and also that the teafunt builties proved to the side lines and also the teafunt builties proved to the side lines and also the teafunt builties proved to the side lines and also the teafunt builties proved to the side lines and also the teafunt builties proved to the side lines and also the teafunt builties are to south side lines and also the teafunt builties proved to the side lines and also the teafunt builties are to south side lines and also the side lines and also the side lines are the side lines and also the side lines are the side lines and also the side lines and also the side lines are the side lines and also the side lines are the si
this morning the site looks pretty nice. Commenter are operator and a worker to the same operator of a while today. Then he had him Doughth worked in the teafunt builtie cast and south side lines if also the teafunt builties cast and south side
and the sate books patty nice. Comme had one operator grading around the seast) for a write today. Then he had him Darforth worked in the teatment building east and south side lines in a class to a last side
grading around the for a while today then he had him Doughth worked in the teatment builtie east and south side lines a D also to the teatment builties prove the
line and also the teatment builting cast and south sile
the all also the little property
a also things I do the pressure to the
and started a started on the senseth area I bet a free
and started laying ont the sipe for the country and. Metuclino office

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 09 0801056 PREPARED BY: Rc Becken	DATE: 5-18-94
PROJECT DESCRIPTION	V: SVE system	
WEATHER CONDITIONS	overcast, cool	
SITE CONDITIONS:	wet, muddy	
PERSONNEL ON SITE: HART: J. Craug,	B. Delisio, R. Becken	
OTHER: N+A, Cer	rone, Danforth, Ferguson, DEC	
EQUIPMENT IN USE:		•
CONTRACTOR: back!	se, Pc90, tamper	

SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME: RP America DATE: 5/18/94

PROJECT NO.: 090801056 PAGE 2 OF 2

PREPARED BY: R C Becken

ACTIVITIES:
Cerrone spent some to
cerrone spent some time today working for H+A moving soil
into the exiter cell they used the backhoe a operator and VI After
that they trenched awas the wal east of the filter Douglath
placed their gipe vayor Ext. + Air Inj. and Ferguson placed one conduit
for heat tracing. The trench was lived with Reaf Ind. and backfilled
Completion of the backfill will be done town . also accomplished were
some backfilling of the last Trench using soils from the roadway paking
Buto Mot which need to be done Do loth
to half with it is a contract to
also. BFC was to be on eite at noon to demp WRB 139 but never
shoved up I called and told then I expected & a truck by 0800
towns (they had done not of problem in Carada today).
Besides the above newtoned Danfoth work they also worked in the
the statute sources and the
blover wow. Purpo are being gented also.
-Terquion reciend the remainder of the mcc garel today and worked on it and the above mentioned conduct.
mentioned wondert,

	41						
)	Mclaren Hart	PROJECT NAME: PROJECT NO.:	FIELD ACTIVITY BP AMERICA. 090801056 RCBeckin				
	PROJECT DESCRIPTION	1: SVE syst	C _I				
	WEATHER CONDITIONS	: <u>prercast</u>	COD [
	SITE CONDITIONS:	set modly	(runed again	last n	jht)		
	PERSONNEL ON SITE: HART: Jim Coming	B. Delisie,	Rick Beken				
	OTHER: AA DE	C. Cerrone 1	Danforth, Forguson	,			
	EQUIPMENT IN USE:						
	CONTRACTOR: bade	hoe, roller, Po	c 90 ·			<u>-</u>	

SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME:	BP America	DATE	Strated	
PROJECT NO .:	090801056			
	RCBeson	 FAGE	OF	1

ACTIVITIES:
Consers on tell +1 + 1
Corrone granted the exist of the road boxes in the west area.
laid man attention of the exert sell work (is seed under time
soil that Carried of a month figure land and we used
also done was the removeder of the exist call work (is sent understoon laid, represented pays laid air injustion fine land and understoon soul that Cereme had injusted onto the late for over to backfill some of the cast trianch this backfill in the last for over to backfill
other who dath afternoon A.
other jobs. In the afternoon A-A had ordered an engle well of
for from BFL to now for the more londed count before in
$\mathcal{L}_{\mathcal{L}}}}}}}}}}$
box to be along the cost soil
bot to be placed into the existen rell toward. Then the box which had
come of 171 into the enot but It is we will be me in off land
just been despel was placed next to WR 171 as we sain of lond some of 171 into the explicit box after this we moved Hit is consiste box into the water to the purpose. Then moved both consiste box box from the treat of a building over to the file fact parking let. I was told by Sue of Hoth that I had approval from the DEC to damp WR 139 which has clean soil I can't in the deciding the decidence of the day.
both from the treat of all then moved both concerts
if was told I Sur of the The felor fact parking let.
demp WR 139 while he so approval from the DEC to
dung WR 139 which has clean soil I can't writing the BEC driver a truth for toward about now became it be late but I did to orbidely
a truck to to 2 1 to 10 to the total but I did to orbide a
Do lith giped the six compressed and various other sign in the lands to include the six stupper towers dust book.
loudding to include the air straiges to
over dut book.
Corner also des and poured a some of Just
Comme also des out poursel a small forter for the exterior



	PROJECT NAME:	BP America	0	ATE: _	5-16-94	/
McIaren	PROJECT NO .:	<u>090801056</u>	Þ	AGE	OF	2
Mclaren Hart	PREPARED BY:	RC Becken				
7 7007 0						
PROJECT DESCRIPTION	: SVE su	stem				
	1					
·						
WEATHER CONDITIONS:	_overcast	cool rain				
	·					
		· · · · · · · · · · · · · · · · · · ·				
· · · · · · · · · · · · · · · · · · ·						
SITE CONDITIONS:	wet, muddy					
	1					
			•	·		
OFFICALINE AND AND				·		
PERSONNEL ON SITE:	R Daline	Pick R 1				
•						
OTHER: HAA Corr	one Danfrith	. Language				
	7	, agusan				

EQUIPMENT IN USE:						
HART: NONE		-				
						
CONTRACTOR: Cat	ers, PC 90,	backhoe.				_
SPECIAL ORDERS / FIE	LD CHANGES:					
		·				
			 			
				·		



PROJECT NAME: RP America DATE: 5/16/94
PROJECT NO.: 090801056 PAGE Z OF Z
PREPARED BY: RC Recken

ACTIVITIES:
Danforth work in the building testing water line a laworking
bulder pulling the said the party of the working on the
Danfarth & Senguan about the site true next Tuesday by the EPA DEC
the site claved up and looking orderly before them.
east end of the exity cell also placed was approp 1/3 of the Reaf Ind.
needed to close the east end. Some and mining was felling was done in
the east trench and begans & Mot 201
boxes which haven't been growted yet. The treach which will be
du dug later this week on the east end of the filter- building
was now cut.
Empire Soils was on all today
Empire Soils was on site today working for Sue Boyle of HAA they pumped out the water tanks which HAA LEDEL IN I
they runged out the water tanks which H+A fileof from bands left by E+E into
the exister cell.

ŧ	114
٨	/claren Hart

Mc <u>laren</u> Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America 090801056 RC Becken	OATE: _ <u>5</u> PAGE1	12-94 OF_Z
PROJECT DESCRIPTION	1: SVE syst	en		
WEATHER CONDITIONS	overcast,	cool		
SITE CONDITIONS: _d	rying			
PERSONNEL ON SITE: HART: J. Panks,	B Delisio, R.	Becken		
OTHER: Neh, Ce	rone, Danfort	h, Ferguson		
EQUIPMENT IN USE:			•	
CONTRACTOR: PC 90	, Cat 225, bo	ackhoe.		
SPECIAL ORDERS / FII	ELD CHANGES:			



	WG	
PROJECT NAME:	BP America	DATE: 645 64
PROJECT NO .:	09.0801056	DATE: 5-12-94
PREPARED BY:	RCBecken	PAGE Z OF Z

ACTIVITIES: Cerrore in travil
ACTIVITIES: Cerrore is trenching in the east one with the Catt 275 and the bank for in the tight areas. At the end of the day the breach was completed to the 3" tag in + the 6" the in all Dill !
was congleted to the 3" to
were tood in a Towns
and covered the the
lies will be placed and and the conduct and the contains
lies will be placed and covered. Mark Cerrone and myself worked on the exertine sell raising the elevation and placing the air injection gapes, the face of the sell is being the six injection
gives the face of the all ila is her planing the air injection
and the soil is being mounded. At the and to the lock (westward)
gipes the face of the cold is the is being duy back (westward) and the sort is being mounded. At the end of the day the cell was looking pretty nice.
in regards to the existen cell in it to the to Mott Pearly
in regards to the exsitu cell in it it was stated that there was
approximately 725 my of soil in the all I dolt to
approximately 725 my of soil in the cell I dolt know for they figured. That best my frames indicate open. 450 my. Disporth laid pipe in the gost trench worked on duct work in the building and worked on piping to the gost of the gost.
In the building and worked on pipers for the au strenger
in the building and worked on piping for the an straper. Herqueon received the MCC and placed it and laid some conduct in the east trench.
Can the agent trench.
Cerron quanted road boxes in the west ones today we were going to mix the grant wing Course coment mixes 1 to the title
mix the grant using Cenones cement winter but it didn't work so we order 2 my of grant from CB concrete. I
order 2 my of growt for CB concrete and managed to do 12 boxes
today tomorrow we will finish the boxes in the west area.

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Mclaren Hart

DAILY	FTELD	ACTIVITY	IOG

Mclaren Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America 090R01056 RC Becken	DATE: _5- PAGE _ 1	11-94 OF <u>Z</u>
PROJECT DESCRIPTION	: SVE system	<u></u>		
WEATHER CONDITIONS:	overcast.			
SITE CONDITIONS: 4	et, muddy			
PERSONNEL ON SITE: HART: J. Panko, OTHER: H+A, Cerro	•			
EQUIPMENT IN USE:			•	
CONTRACTOR: Pc 9	0, Cot 225,	backhoe, tompe	c, pump	
SPECIAL ORDERS / FIE	LD CHANGES:			



PROJECT NAME:	BP America	1	D. 4 TP.	5-11-94
PROJECT NO .:	090801056			
PREPARED BY:	RC Becken		TAGE .	2 OF 2

ACTIVITIES:
Cenario La Lico
Cerrone backfilling in the west area tanging lifts of 12"
the top 12" will be stoned for a government base. In the east
area Cerrone of placing a base or led of 1"ROC or soul dependent
on whether Reef Industries is used the Vanforth is laying the
Then conduit and the paritary line is placed and finally
the conduct on source is covered with sail or 1" ROC. Trenching should be able to the again after the morning break and we
should be able to trend to the test to
is also installing the duct work from the six strippers to the
been trenched app. the half wan point between the treatment building building. At lunch time the west can be felters
building. At lunch time the wash
tangue + bookfilling to do. By the end of the whift we lad trenched
in the east nea to Geramons trailes most of the anth of the
this trench is suized with the 3" +6" the remaind of the quantities
and sanitary line appr. 20' will be done in the Am.
DIV.

114	
Mclaren Hart)

DAILY	FIELD.	ACTIVITY	TAG
		ACILVII	

Mclaren Hart		BP America 09 080/056 PC Bocker	DATE: <u>5-10</u> PAGE <u>1</u>	0-94 _ OF <u>Z</u>
PROJECT DESCRIPTION	1: SUE syst	len en e		
WEATHER CONDITIONS	: _overcast_	- clear, sunny		
SITE CONDITIONS:	vet rain la	ot night.		
PERSONNEL ON SITE: HART: J. Parko OTHER: HAA, Ce	,			
EQUIPMENT IN USE:				
		purps, tampece		



200	
PROJECT NAME: BP America	DATE: 5-10-94
PROJECT NO.: 09 080/056	
PREPARED BY: RC Rocks	_ PAGE Z OF 2

ACTIVITIES. Co.
ACTIVITIES: Cerrone finished trenching in the west area at
will be started after lunch like are the bekind Currow, back filling
to blanked after lunch, like are having problem with
will be started after lunch. We are having problem with water every hole we dig we have water filling it immediately.
Cerrore is trenching in the east over by Sunch we had
backfiller stated in the west of the fight pressure gas line. After lende
1/2 to 5/2 m ld a sign and the end of the day as as
continued digging in til use was done . In the last trench we
continued digglis with we were 10 feet from the BEC not DE box the we stoned and laid reise es the ground to 3"
and the descharge the as
box the we stoned and laid spipe eith groundwater 3" fill line installation and Danloth survey in to take and the sanctaing
line installation and Danloth sumped in to take up the plack. We will work on a TM with Don forth, Sue will sign 37/ on the daily as I get then.
The daile a 1 + +
and discovered a problem with the flanger on the brief of the brief
and discovered a problem with the floringer on the duct work as opposed is the air strepper flage in flat all made of the fibergland and the duct work is stainless and has a vidge to get a glood seel then were tableton to much and started crarking the fiberaless Cerrone day two small trendess for some day the fiberaless
the skie show the six straper flage in flat al male of
apol sol the the test work is stainless and has a ridge to get a
flame & time to such and started cracking the liberaline
Cerrore di to 100 in
Cerrone duy two small trenches for heat trace power lines on the north east area, Ferguson laid conduit to them immeliable.
and the start of the inneltable.

114	
Mclaren Hart	

Mclaren Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America 09 386/356 RCBecken	DATE: <u>5/</u> PAGE <u>1</u>	9/94 OF
PROJECT DESCRIPTION	1: SUE syste	· ,,,,,,		
WEATHER CONDITIONS				
SITE CONDITIONS:	set frain one	n the weekend)		
PERSONNEL ON SITE: HART: J Panko, OTHER: RIA CEN		Becken, K. Findron	rolous	
EQUIPMENT IN USE: HART:	(Le De 90 to	pi:up:	•	



PROJECT NAME: RP Fimerica DATE: 5-09-94

PAGE _____ OF 2

PREPARED BY: RCBuken

ACTIVITIES: last ateleti

4
Mclaren Hart
1 160 6
PROJECT DESCRIP

Mc <u>laren</u> Hart	PROJECT NO .:	BP Fimerica 0908018570 P. C Berken	DATE: _ PAGE _	5-06-94 1 OF 2
PROJECT DESCRIPTION	vi SVE syst	ten		
WEATHER CONDITIONS	: <u>overcast</u> , i	rain, hail, cold		
SITE CONDITIONS:	uet			
		2. Becken Ly Ferguson	•	
EQUIPMENT IN USE: HART:	hoe, pumps, Do	c-90, jumping jack	•	
SPECIAL ORDERS / FI	ELD CHANGES:			



PROJECT NAME: BD KIMENICA	_ DATE: _5-04-94
PROJECT NO · 19 APRILLED	
PREPARED BY: 20 Becken	PAGE OF T

ACTIVITIES:
Carron bookfilling on the west area following the fitters for
so we had to give almost continuously of the east area we are
degute at the interpretion of the ground water since and the wardway
we will get beyond that then backfill what mean the pine and
conduct was laid I want to get at least one lift of worl in the tranch so we don't lose everything over the weekend. The east
trench was almost full of water this morning and water is running
in almost as fast as we are sugarment. Danforth is working in
me his advances which have a color wine in the building Herry showed
me his a drawings which have a couple of grobbers of meonasterage to
A pollo Steel come in this and to call Shaked in Ca.
the well and
Cerrone has everything in the west dug, sixed & backfilled up to BI 165. In the east to
the state of the s
up to the santary which we will try into for our sewage.

114
Mclaren Hart

Mc <u>laren</u> Hart	PROJECT NO .:	BP America 09080/056 Rc Becken	DATE: _5-0 ' PAGE1	5-94 _ OF _Z
PROJECT DESCRIPTION	v: <u>SVE</u> syste			
WEATHER CONDITIONS	: overcost			
SITE CONDITIONS:	lry			
	1			
PERSONNEL ON SITE: HART: M.D'Evfimia	,			
OTHER: HAM, Ce	rrome, Wanfor	th, targustn		
HART: KINU CONTRACTOR: PC-9	d heekling .	Vato to	·	
		ciato tampor		
	- Similaria			



PROJECT NAME: BP America DATE: 5-35-94

PROJECT NO.: 090901056

PAGE Z OF Z

PREPARED BY: PC Socker

ACTIVITIES: Curone trenching in west area, we are now in front
of the boarding dock encountered menos water problems, pumped
perend menter to engly. NON readings in Bit at 0800 was Onen
perend minter to engty. NNV readings in Bt at 0800 was Oppen, worky I exceed the acid 15:20 ppm. Brownse of april trusted was are
Though the soil directly on to a waiting truck are will have only mough
the line from the SPDES box to the main trench while the other and of
1 miles and sheeps and the sheep and
1906 the east crew uncovered a 18 conjugated steel sign which crossed the
sol with of the GW lies it was very notion on leaking we splugged the belle with Denton to
in the area of the Cold of the degree
in the area of the 6W lines we disovered that the a heat trace
The hand war we pulled The time . We found it
conduit was buried of 1/k' above the GW line. We found it The hard wan we pulled the conduit and wire approve foot and at this point it is unknown what it
My feeling is to discourse to
My feeling is to disconnect the power line had forget about it the line is no longer needed. I have been gutting the give together for the sin injection lines in the existence cell like to give together
In the air insection lines the saint lines the give together
for the air injection lines in the exister cell. We took two books by soil back to the exister cell appr. 25 cy. In the west area
we dry 5 branches also the area the west area
expel & branches glue the associated main trench the fitting have wester
wester a good day in the
Donforth lad gige in the west and worked in the builtie,
Tergram worked in the briefly
Cerione grouted our 6" live into the SPNES box wing poeter
gling.

*	11
~	<i>lc<u>iaren</u> Hart</i>

Mclaren Hart		BP America 09 080/056 R C Bicken	DATE: <u>5.04-</u> PAGE1	91/ OF 2
PROJECT DESCRIPTIO	IN: <u>SVE sys</u> t	e.,		
WEATHER CONDITIONS	s: clear wa	rn		
SITE CONDITIONS:	dry			
PERSONNEL ON SITE HART: A. Maces, OTHER:	B Delisio, M. D	Eufinia, R. Becken		
EQUIPMENT IN USE: HART: HDU (CONTRACTOR: 10cm				
SPECIAL ORDERS /	FIELD CHANGES: _			



		TO G	
PROJECT NAME:	BP America	DATE:	5-04-94
PROJECT NO.:	090301056	PAGE	2 OF 2
PREPARED BY:	RC Backen		V,

ACTIVITIES: Cerrone working in the west and east arein backfilling
continue to the sound (still the 3"+6" forth
was from the settle up of the sound for the 3" and from the SDIES
box for the 6" line. Both lines were gressing of to 50 ps; and
held for one how. The 3" lie was stated at 0803 and the 6" at 0935.
While the pressure testors was being done praison placed enduit
in the one trench and Cerrore continued to dia
anthony sinceres and I had been the
the GW lines cross the road, at this time they started backfull
the tranch from the and study upo to the point where the
lives had versed the account to the
lives hard vacased the presence testing. We lit ground water
or more leakage from the sanday line which we
are transfer parcell to purpos of water is necessary.
On the west side all trenches were backfielded than well
stoned thereto ogam at the end of the day we had upper
10-65 ft. Thench ighed again.
started trends ogam at the end of the day we had appro- 10-65 pt. of trench igher again. Douboth also had ne working in the building as did Daywoon.
Derguson.
I spoke with Don McSavan the Wheatheld hulding inspector who sand to be to tode a both worn is repressed I improved Brian of that and said I would contact Magain of Pipula.
inspector who soult to be to took a letter
I informed Brian of that and said I wall a + + 16
Pipela.
Lion Rielson and Mott Plants in the
had linely towned the site of the towned the
Lion Rielson and Mott Planty growed or site at 1206 had hack towed the site and went through the OHM manual with Bob + I.
We gave Ho A information on the Real Industries so They could order some for their 5PDES work
world total some for their SPDES work

MClaren Hart	DAILY FIELD ACTIVITY L PROJECT NAME: BP America PROJECT NO.: 09 080 1056 PREPARED BY: R C Rocken	DATE: 5/3/94 PAGE 1 OF 2
PROJECT DESCRIPTIO	N: SVE system	
WEATHER CONDITIONS	s: <u>nice</u> , warm	
SITE CONDITIONS:	dry	
	errone, Danforth, Ferguson	
EQUIPMENT IN USE: HART:HUU (2) CONTRACTOR:buu	KLOR, PC90,	
SPECIAL ORDERS /	FIELD CHANGES:	



PROJECT NAME: BP America PROJECT NO .:

090801056 PREPARED BY: RC Becker

DATE: 5-03-94
PAGE 2 OF 2

ACTIVITES:
Ela the west area agas 1/2 how I to also in the east area.
next of the day we so the being were due then the
the area of AT-42
some granderter while we done the discourtered
the order of AT-43 and when we dopped described and of the day we had again to the proof At the end of
the day we had expers. In the teach which was spend backfred of that teach to the road coording for Pour day
that tievel to the inter the wood crossing for PWZ day
box and the control of the blue flow the a SPEDES
to the middle of the M/4 1000 to along the edge of the worl
to the middle of the M/A field trailer who a we straped disain
1 the gave and they good !!
end stated land feet find in the game and the game in the game and the game in the game and the game in the game of the game with the exception of backfilling. I done up to the MIA trailer with the exception of backfilling. I builded and landing gips in the west a look great great. They had three new arms tooks which is
Douboth with 1.00. 00
west a last wear they be I the
strest a local wear. They had there men any today which as much
-Teranson working in the building of its most east ones with the facel board of lay conduit in the trend
with the savel board a D
they tondered by the formal.

Mclaren Hart	DAILY PROJECT NAME: PROJECT NO.: PREPARED BY:	BP Am 09080	TTVITY LOG Nerica 1056 cken	DATE: PAGE	5-2-94 1 of <u>2</u>
PROJECT DESCRIPTIO	IN: SVE sy	stem			
WEATHER CONDITIONS	S: cool Sunr	7			
SITE CONDITIONS:	good				
PERSONNEL ON SITES HART: A. Mare	B Delisiz			en	
OTHER: N+A, Ce	rrone, Done	toth - fe	erguson		
HART: HNO (2) CONTRACTOR: back		ump truck			
SPECIAL ORDERS / I	FIELD CHANGES: _				

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PROJECT NAME: BP America DATE: 5-2-94
PROJECT NO.: 09080:056 PAGE 2 OF 2

PREPARED BY: RC Becken

ACTIVITIES: Corrow cleaned up the open soil from the west area
The state of the s
the transfer with the dealers.
the state of the s
the sent and the sent are
the want you then see the
The was not wash fully to to The
John Lower Radies for I !!
from the give at a gretty good rote (ager 5 call/min). I told HA
from the pipe at a gretty good rate (ager 5 call/mi) 1 +0 1 11 11
that I didn't have the man piver nor the tie to die the
that I didn't have the manpines nor the time to fix the pipe so they
got Severan to handle it. Donforth worked in giving in the south field, placed the re lies mention above in the east area and worked in the builder. Dinforter had one fitter who was kneeling on the ground of little.
mention above in the east area and worked it to all the
and one fitter who was kneeling on the grand al when he stood
up twisted his knee, he was taken to the heart I have the plant
day had knee surgery.
Ferguson would the facel board for PW-2 and worked in the
forser substitution besides working in the build!

Mclaren	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: RC Becker	
PROJECT DESCRIPTIO	N: SVE system	
WEATHER CONDITIONS	s: _overcast, rain_last night	
SITE CONDITIONS:	good	
HART: M. DEUFIN	uic. B. Delision, A. Mare, R. Becken	
OTHER: HAA, Cere	rone, Donforth, Forguson	
EQUIPMENT IN USE:		•
CONTRACTOR: <u>back</u>	Loe, Pc90, jumping jack	
SPECIAL ORDERS / I	FIELD CHANGES:	

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PROJECT NAME: BP America DATE: 4-29-94 PROJECT NO .: 09030,056

PREPARED BY: RC Becken

PAGE __ COF Z

ACTIVITIES:
Den forta in his the distance of the second
Dentate working in the building placing the Calgor Ho o unit and glacing piping in the trenches as needs of I asked Mike Adams of Danfath if he had snything mission over the last week or as the couldn't say if any pipe had been atte
Ada I Cital the trenches as needed. I asked Mike
the had anything messing over the last
he so state conduct say if any pipe dad been stolen
the quanty of sign he has someone could take a
week or as It he couldn't say if any pipe had been atolen became of the quantity of sine he has someone could take a hundred fact and he wouldn't know until towards the end of the jobs
of the John
- Leginon was running conduct for the vacuum blowers
and struction overload wire from the substation to the test
Lerguson was running conduit for the vacuum blowers and station overband wire from the substation to the treatment building.
The state of the s
and the area cleaned up then that was went to the west area.
rock, which obvisional slavel progress Altale
nock, which obvious he slaved progress. After lunch we and did
We had a frollen this atternoon in the wind
healthy safety issues is smoking the
We had a froblem this afternoon with H+A someoning. health + safety issues in smoking of type + morking of somes. I ordered 9 rolls of but to to the hourse
I ordered 9 rolls of Bestorot that to 1
up all the increed areas
I ordered 9 rolls of Bustonat that should be enough to finish up all the increase areas

Mclaren Hart	PROJECT NAME: PROJECT NO.:	FIELD ACTIVITY LOG RD AMERICA GROROUSTIS RC Tocken	
PROJECT DESCRIPTION	N: SVE SUS	512	
WEATHER CONDITIONS	: overcont	cold	
SITE CONDITIONS:	grad		
PERSONNEL ON SITE: HART: B. Delisio,	MA. D'Echuera	A Mare, R. Buken	
OTHER: H+A Cerr	one, Danforth	, Fergusen	
EQUIPMENT IN USE: HART: _ 서いりを(え)			•
CONTRACTOR: books	Loe, PC90		
SPECIAL ORDERS / F	TELD CHANGES: _		

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PROJECT NAME: BP America DATE: 4-28-74

PROJECT NO.: 69 080 050 PAGE 2 OF 3

PREPARED BY: RC Recken

ACTIVITIES:
(lerone duy trench in the west and east area, in the past
they congetted the the three Trends for the various wells frenches also the noadance. In the west over we duy live branch
trenches plus the arriver and the trench
trenches plus the again main trench now of these will be constituted today as for a backfilling is concerned. I just found out we have
pered wal and the arrivant to the treatment building . Treatment
is going well to a charge.
terauson working in the building glas getter ready to place the
Dontoth recover of the autotation to the treatment building
of the day getter it is it the building also finished placing blowers
the block room. As seeded Donforth personnel installed pige into
the trending in the east area the set
the trending in the sast area the west area wasn't pipe of started justilled to town on it wasn't ball filled that will be done first
this toward first

111
Mclaren Hart

	PROJECT NAME:	Bf America 09 0801056	DATE	: 4-2	7-94	
Mc <u>laren</u> Hart	PROJECT NO.: PREPARED BY:	09 0801056 RC Becken	PAGE		OF <u>2_</u>	
PROJECT DESCRIPTION	: _ 5VE sy	ster_				
WEATHER CONDITIONS:	rain, ove	reat, windy				
SITE CONDITIONS:	>c-o=					
		B. Delisio, R. Becken				
EQUIPMENT IN USE: HART:	~e, D-3		•			
SPECIAL ORDERS / FII	ELD CHANGES: _					



PROJECT NAME:	BP America	DATE:	4-27-94	
PROJECT NO .:	09 0801056	PAGE		
DOCTAGED DV				

ACTIVITIES: Cerrore removed the culvert under the driveway to the
Malment building this head to be done because it is the
That the blowle that were to arough today were on a double drope
tracker which would not alear the horse at the culbert, When the
think arrived it was a small those which meant we wanted
our time. Decause of the rain of decided not to treat in the west
area, but we did trench in the road east of the filler doubt
some of two of those trenches (due lind, sanded piped, souled)
aread back filled temper al stone on top The D-3 finished
some coming needled in the west ones a store sucked some store
out of the court yand one which was used to the trending Alas done
they by all plurested in wester down Trees to the worth
growted the Beles does in PW-2 and day the holes for the pelecture
growth the Beles does in PW-Z and duy the holes for the gelection
The fact of the control and reclared from the server of the
Not display up nove necessary hardware howefully tongen
the ply word to complete the not
Distarth received y blower today what 95% of 11
worked on placement of them the to block won a lie and
in the afternoon to pige the trenches in the east area. Very little
in the afternoon to page the trenches in the east were littles if any work was done in the south well field
(errore also set the legs (pipe) for the panel box for PWZ

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America. PROJECT NO.: 09.0801056 PREPARED BY: R C Backen	· · · · · · · · · · · · · · · · · · ·
PROJECT DESCRIPTION	N: SVE System	
WEATHER CONDITIONS	s: overcast then sunny humid	
SITE CONDITIONS: _0	ry	
DERSONNEL ON SITE: HART: A. Maze.,	M. D'Eufinia, B. Delisio, R. Becken	
	me Danforth, Ferguson	
	rigging - crone, D-3, backbox	
SPECIAL ORDERS / F	TELD CHANGES:	

.



PROJECT NAME:	BP America	DATE:	4/26/94
PROJECT NO .:	09 080/05%	PAGE	7 05 7
PREPARED BY:	Z.C. Becker		

ACTIVITIES: Cerrore finished laying Bentonot in the west area also
Rolley bot 151-25 was dunged and placed in the west area the PPE collections was dunged and placed in the writing alla of
the PPE adlog was puched up for disposed at Cum. The trench in
which there mines come the said of the trench in
which three pipes was the word south of the main gate was
ding and the suizes were installed the pupe were warpped in free find.
of the soil was object a a sold on top . The remainder
of the soil was placed under poly and will be placed into the existence all tomorrow. The small area on the continuest come of the
filters building was covered with Bertont and all areas were
down ? If I
Be Rolling box 151
bellot to M/H, Hill has now taken over that box.
Partoth is work is it I all the
Danforth is working in the building, they would well field and
also placed the pipes in the trench mentioned done
Jergmon installand quide wires on three poles on site also installed one pole lock mean the mortheast and the
on pole back near the northeast some of the building.

اُ	AIA
	Mc <u>laren</u> Hart

Mclaren Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America. 090801056 RC Becken	DATE: March 25.19 PAGE OF	2.
PROJECT DESCRIPTION	v: SVE Syct	y		
WEATHER CONDITIONS	: rain in mo	ming, hismind, then	sunny oftenaror	
SITE CONDITIONS:	.1et			
	M.D. Eufinsa, B	Delisio, &R. Beike . WS Johnson Fergu		
EQUIPMENT IN USE: HART: Bents just CONTRACTOR: 28 1	, ,	khoe, excavator, D.	· 3	
SPECIAL ORDERS / F	TELD CHANGES: _			



PROJECT NAME: BP America DATE: 4.25-94

PROJECT NO.: 290801056 PAGE 7- OF 7
PREPARED BY: R.C. Seefen

ACTIVITES: Cerrone laid not in the west over completing all but about 5 panels which we'll do first the in the
about 5 panels which we'll do first this is the morning. Files cleaned up the onen where the atockpolar along in HA hill First line
up the orea where the stockpular clay is . H+A had BFC deline
a rollog bot as while the truck was there we had her trut of
up the orea where the atockpiled clay is. H+A had by a deliver a rollog bot so while the truck was there we had her try to dange the last renaine dity off bot, the truck could't such it up out of the left and later in the day - I had Cenone dig some out of the last and take it to the day - I had Cenone dig some
so the left and later in the day I had Course di
The exister cell was cleared up the dist which had been desped
at the Love of the cell the last welk was all it to
sock cement of pavement that HAB a l the DET
last week was cleaned up.
Danforth worked on serving in the 1.71 and 1 1 1
in the building al of USTolica the
at the force of the cell the last welk was splaced on top and the rock, cement & pavement that HA and the DEC was complaining about lost week was cleaned up. Danforth worked on piping in the south well field also worked in the building and work with with an streppers.
Ruson has it the laborers when will be picketing the site tomound not my site but where Sevenion is working on the SPEDES. Sevenion started today on the SPEDES aleaning and quality
not my site but the Some will be freketing the site tomorrow
started today on the SPENES. Sevena
the state and grubbing

Mclaren Hart	PROJECT NAME: SP America PROJECT NO.: 59 0851056 PREPARED BY: R.C. Bicken	PAGE1 OF
PROJECT DESCRIPTIO	N:SVE system	
WEATHER CONDITION	s: Year sunry cool	
SITE CONDITIONS: _	dry	
PERSONNEL ON SITE HART: M D'EBAN	ia, B. Delisio, R. Becken	
OTHER: bl+f1, Cer	rone, Do-Forth, Ferguson	
EQUIPMENT IN USE: HART:Bentoment	r10,9/ma	•
CONTRACTOR: 25	ton crome, D-3, backhop	
SPECIAL ORDERS /	FIELD CHANGES:	

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PROJECT NAME:	BP America	_ DATE: 4-22-54
PROJECT NO .:	090801050	_ PAGE _ 2 OF 2-
DOEDAGED BY	Dr Rada	

ACTIVITIES:
Cerrone working on laning Bertowot in the west were from the
south and working northward. The inches trend needed a little
more work done on it also. By bunch time we had covered appear
one half of the west near we storned lawing out because and of
teep up with the cover and I want willing to gamble no row over
the weekend. The laborers are loading the trails for Morday on located in
small areas where it is needed. I theliave we will be having never
with trucks on the bodies dock area after the mot is donor begans the
well see the stone cover on think they are shive onto it we will use if
to get up fence or something to keep them of.
Donforth is working in the building of in the south well field the
are more an alamen rate it looks like the will have the courty will
fill dole in a matter of days.
- Terguson is work in the fullish and also gilled the way
in the poeth west comes of the filters building.
Corrone also backfilled the conduit trench on the porthwest
come of the felters building.

Mclaren	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 02 0201056 PREPARED BY: RC Becken.	DATE: PAGE	4-21-94 1 OF 2-
PROJECT DESCRIPTIO	N: SUE supto		
WEATHER CONDITION	S: cocies 50° windy		
SITE CONDITIONS:	dru		
PERSONNEL ON SITE HART: 18. Dollsen	m. DiElifymia, P. Becken		

EQUIPMENT IN USE:

HART: Festomet 199/19

CONTRACTOR: 28 to cross, boot haves (2) D-3

OTHER: HVA, Cerrone, Danforth, Forgueson

SPECIAL ORDERS / FIELD CHANGES:

111-4
Mclaren Hart

PROJECT NAME:	BD Finerica	DATE:	4-21-94
PROJECT NO .:	09 0501056	PAGE	
PREPARED BY:	RC Becker		

ACTIVITIES: C'enne laid Be tonot à The contr area aden tot
was Linds of appr. 1030 to haved to the contigued become
there were to much stuff (dirt piles of sand pile , atome will which
had to be moved before be want start the west was.
to the sothwest were at because of the traderior of the
at to work around. It the god by its day not hard the
contract finished and coursed.
The contract was been to because we couldn't get machine to the stratherest when all because of the transment often to still to work around. At the contract is day are head the contract finished on lovered. Donforth worked in the builded on Postatod to give the
menta well field.
Tergueon pulled wire in the points well field
At 1500 Sue Bowle outed me if we could more our strange Trailer
toward morning of his the only want and he moved was to judoad
towns morning of heal the only was it sould be noved was to unload it and then left it with the many often further observation we
containt even do that become of evine overhead, but any
it would be moved would curtail approx a i have paried of no
production from Conone - Danforthe
· · ·

Mclaren	PROJECT NAME: BY America PROJECT NO.: 09 080/0576 PREPARED BY: RC Becken	DATE: 4-20-94 PAGE 1 OF 2
PROJECT DESCRIPTION	N: SVE system	
WEATHER CONDITION	S: coal 50° windy sunny	
SITE CONDITIONS: _	dry	
JERSONNEL ON SITE	min, B. Delisio, R. Berken	
OTHER: NAK C	errone, Danforth, Fergison	
EQUIPMENT IN USE:		•
	ton evene, backhoe, D-3	
SPECIAL ORDERS /	FIELD CHANGES:	

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distance in the contract of

an addition

111-4
MClaren Hart

		
PROJECT NAME:	BP America	_ DATE: 4-20-94
PROJECT NO .:	09.086/1356	_ PAGE OF 2
PREPARED BY:	R.C. Beeken	

ACTIVITIES:	
Cerrone lain Butomat in the court area Today starting at	thi
from the gold of the courter and of comme also placed the	
from the "out of the courter awa comme also placed the	
though over ment to the first well. The gouth area will be	
completed early tonomin morning at which time we will move to the evert and.	٤
to the evert and.	
Drifath worked pipe in the authorit over al worked in the teleston building they are keaping up to Course daying	
the to filter building they are kearing up to Course daying	
neate	
Forguson pulled wire in the south are from the treatment foulding to the Girls.	<u></u>
bully to the two.	
his gunged the water out of the met aposts in the country of and hopen to dry it out a little so we can have a solutioned base to lay wheatout on.	air.
home to dry it out a little so we can have a sold base	<u></u>
As has dientount on.	
	···-
	<u></u>
	_ بوبـــــــــــــــــــــــــــــــــــ

Mc <u>laren</u> Hart	PROJECT NAME: 37 America PROJECT NO.: 09.0801056 PREPARED BY: RC Becken	DATE:
PROJECT DESCRIPTION	N: SVE system	
WEATHER CONDITIONS	s: <u>cool</u> overcast	
SITE CONDITIONS:	drying	
Egripment ERSONNEL ON SITE HART: Banton	at rigging	
	come, backhoe, D-3	
EQUIPMENT IN USE: HART:	ina, R. Becker, B. Delisio	•
CONTRACTOR: _ H	A. Cerrone, Donfortz, Ferguson	
SPECIAL ORDERS /	FIELD CHANGES:	

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114
MC <u>laren</u> Hart

Dati	tem voilill fod	•
PROJECT NAME:	BP America	DATE: 4-18-94
	090801056	PAGE 2 OF 2
PREPARED BY:	RC Berken	_

ACTIVITIES:
Cerrone laid Berts most in the south east area this was
all covered except around and under the ground water give him
This area had two small prea which with extremely well
which we covered and had to be a coneful when placing
the stone coner.
in the wortheast area just east of where we were placed
in the northeast area just east of where we were placing
Butomet. Bob tolls me there are problems with the convicte
god for the strupper town the a shor & bolts were not placed right and mether was the part
placed right and wether was the past

Mclaren Hart	PROJECT NAME:	FIELD ACTIVITY LOG BY AMERICA BY 0601056 RC Briken	DATE:
PROJECT DESCRIPTION			
		sindy, overcast then	SUNNY
SITE CONDITIONS:			
HART: M. DE	ofinia , B. De	lisio R. Becken son, Donforth	
<u></u>	lat rigging	backhoe, D.3	

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11-1
Mc <u>laren</u> Hart

PROJECT NAME:	BP America	DATE: 4-19-94
PROJECT NO .:	090801056	PAGE 2 OF 2
DOEDADED DV.	RC Barba	

ACTIVITIES:
Donfath piping the south east area working towards
the west al the courtyand. Also workin in the testnet building
Frequent pulling wire from the treatment building to the
GWS PW-1 , Ferguson also turned off the power to the treatment
building because a Cerrone was low Be to the
building because as Cerrore was laying Bertont under the
Corrow laid Bertont in the south well field starting at
the South east comes of the filters building working west ward
stopping of the south ward extension to the filter builden.
Cerrone also fuicked placing the cover store in the contrast
onen were we land centerent yesterday.
Had a breif nesting with See Boyle Dave Martin of
Kevin Glaser of the DEC to inform him of ongoing progress
and up coming events.
Both worked in the soulle a si
Bob worked on the publim envolving the oir strippers.

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: RC Rocke.	_ DATE: 4-15-94 _ PAGE1_ OF
PROJECT DESCRIPTION	N: SUE system	
WEATHER CONDITIONS	s: nice, sunny, windy 75-80°	
SITE CONDITIONS:	drying fast	
	B. Delisio, R. Becken Errone, Ferguson, Do-Forth	
EQUIPMENT IN USE:		
	ton crane, backhoes ("D; D-3	•
SPECIAL ORDERS /	FIELD CHANGES:	

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MCIArer Hart
ACTIVITIES:

Mc <u>laren</u> Hart	PROJECT NAME: _ PROJECT NO.: _ PREPARED BY: _	OP AMERICA	DATE:	4/15/94 2 OF 2
olow the country of the survey	Ath slockfill I the slocking The world of the gen. 3/4 of the come Bountains this of thomas the Deform of the come public on started laying	for forther but for an ate too hather repair to	as completed for the control of the	to the ablance. specked the west area, to was done

PROJECT DESCRIPTION				-
	1: SVE	system		_
WEATHER CONDITIONS	: Dvercas	t cool to clear u	Jarm	
SITE CONDITIONS:	drying			
DERSONNEL ON SITE: HART: J. Po-ko OTHER: HAA, CO	B. Delisia.	R. Becken		
EQUIPMENT IN USE: HART: Be to Mo CONTRACTOR: 28	., ,	khee (2), the Con	t 225	
SPECIAL ORDERS /	FIELD CHANGES	:		

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PROJECT NAME:	DATE:	4-14-94
PROJECT NO.:	PAGE	
PREPARED BY: RC Be	en	

ACTIVITIES: Corrowe land Benta Mat from the VES trailer to
The portion to the training of the state to
The southern most edge of at the south well field and care
it with #2 ROC. this was done because the area in so wet
and widdly banforth was unable to pelow the paper supports
for the seventien vapor extraction hies the save the pipe supports
The state of the s
seems in o near the courtinal were repaired and patched
some people of the west area was started and trending
in the west area was done. The west area trenching is
proceeding slowly we are have publed with
so ground water / runoff and room to work the Metalatin
has so such junk around. One load of med day sat of
the west area was dumped into the exite sell for treatment
Donlorth started seining in the west east
Donforth started seize in the southeast area and also as mentioned above Started running the seventeen NE lines
from the VES trailer, work is also being done on the
to the state of the state of the
take in the bulling . It was descovered that the descharge
purps were placed wrong and will have to odd on to at bast
Ferginon continuing pulling wie in the treatment building.
I took two feeld mode to H+A botho no "is one.
to use #1 ROC for page bedding onlever a of the second
to use #1 ROC for page bedding where a f the second to backfull the complete trench with story of readed
the second world neveritte a change so les.

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: PC Becken	OATE: 4-13-94 PAGE 1 OF 2
PROJECT DESCRIPTION	ON: SVE system	
WEATHER CONDITION	VS: roim, sunny, rain	
SITE CONDITIONS:	wet, middy	
· ·	J. Parko, P. Becke_	
EQUIPMENT IN USE:	errone, Denfortz, Ferguson	
HART: il い	khee, Cot 225, D-3	•
SPECIAL ORDERS /	FIELD CHANGES:	

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PROJECT NAME:	BP America	_ DATE: _4-13-94
PROJECT NO .:	09 0801056	PAGE 2 OF 2
PREPARED BY:	Rc Becken	

ACTIVITIES: Danlorth worked in the treatment building to
ACTIVITIES: Danforth worked in the treatment building plumbing the
Lerous Fati - 20' + 1 0'1.
The same was quite one a the building
two tarks and in the north well field. Hergeson Electric was quelling wire in the building of wining pumps also in the ptratual building.
Carrow prepared the the over a rest of the filters building
where the decon pad was, they dismontled the decon pad
abancal up the sile of old what chain lead love a
youts and numerous other frink which dad been gilled in
this area, it was decided that the man was to wet
and slopping to place Bento Max. The small area which was
left undone yesterday in the south well field at the intersection
the secret of the secret will find at the intersection
of the paved road and the aboveground water line was completed
and covered. The five wello which were broken were repaired
and treaching which was left uncovered in the west and was
backfulled. Also tarted was the uncovering of the two
Rands of Bents of the receiver of the country
to separate when rovered last week. Water was pumped all day
from the as swale near the VES trailer and also from the
trenches open in the west and.
28 ton crane was broke down,

Mclaren Hart	PROJECT NAME: RP America PROJECT NO.: 090801056 PREPARED BY: RC Becker	
PROJECT DESCRIPTION		
	wet, muddy	
	B. Delisio, R. Becken	
EQUIPMENT IN USE:	t rigging, HNU	•
CONTRACTOR: 28 to	on crine, backhoe (2), 1)-3.	
SPECIAL ORDERS /	FIELD CHANGES:	

da .



DAILY	FIELD ACTIVITY LO	G	
PROJECT NAME:	BP America	DATE: 4-1	12,934
PROJECT NO .:	09080.056	PAGE	2 OF 2
	RC Redon		
			

ACTIVITIES: Yeignon Electric was pulling wires from the buildle
ACTIVITIES: Yeranson Electric was pulling wines from the buildle. to the pole bokes today, they also turned off the gover to the treatant building because we were working with the crane close to the wair govern like.
building because we were working with the crame clone to the wair
gover like
Danforth continued working in the north well filly also land
Danforth continued working in the north well fill, also laid spipe in thenches in the west end and worked in the buildey.
Clyrone had two crows have again today one crew was working
Cerrore had two crows have again today one crew was working in the west end transpelled and backfilling the Brian supervised this tack. The other crew laid Bentomat in lake Cerrore after
this tack. The other cres sand sente has in take (enough after
prepring it and raising the abevotion slightly using alean soil generated. When the digain trenches. The lake cerrone area was completed
and covered with stone with the exception of a small area which
has to be precied in using small sections of Bentomet which we
will do tomorrow morning while the operators prepo the next
med do tomorrow morning while the operators preps the next
Our third at shipment of Bents Mat finally awie of at 1030
Due third at shipment of Bents Mat finally awied at 1030 this morning it was due in last findey.
-

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MCIaren Hart	PROJECT NAME:	BP America 090881056 RC Becken	DATE: .	4-11-94 1 OF 2
PROJECT DESCRIPTIO	ON: SVE SYS	stem		
WEATHER CONDITION	S: SUMAY, WA	urm, good drying	weather	
SITE CONDITIONS:	drying			
PERSONNEL ON SITE HART: B. Radus	B. Delisio, J.	she Panko, R. Re	ck en	
OTHER: HTA CER	rone, Darforth,	Ferguson		
EQUIPMENT IN USE: HART: Rento Mos		J	•	
CONTRACTOR: _221	ton crone, D-	S, backhoe		
SPECIAL ORDERS /	FIELD CHANGES:			



PROJECT	NAME:	BP America
DDA FOT	NO.	00 000 001.

PREPARED BY: RC Becker

DATE: <u>4-11-94</u>
PAGE <u>Z</u> OF <u>Z</u>

ACTIVITIES:
The load of Bento Mat did not arrive again Today The truckly
company said it was broke down in West Virginia it should be
here toporrow.
Cerrone working in two areas one crew is trenching in the
west area Brun & Tule are supervising this. At appril 1030 we
discovered another underground water line?) in our first extantion
which was not suppose to be there we managed to not bank it.
H+A was retified investition of pretures were taken Transfer
completed was 4 branches and the main line running between Them.
Bestrat town laid in the couth east were a was it was from
the divewen to the treatment building this over was completed
and covered with store. Dougath worked in the north well
fell I in the treatment building also competed was the
replacement of the toso consiste and in the with earl esne
of the fitte bulling the blowers were als menuted of on the
pod "
•

Mclaren Hart	PROJECT NAME: SP America PROJECT NO.: 09 056 105 6 PREPARED BY: RC Backen	DATE: <u>4-8-94</u> PAGE <u>1</u> OF <u>7</u>
PROJECT DESCRIPTION	vi Sve system	
WEATHER CONDITIONS	scany, coal	
SITE CONDITIONS:	snow melting, wet, moddy	
	R. Becken B. Delisic J. Pan	kc
OTHER: H+A Cer	rone, Danforth, Farguson	
EQUIPMENT IN USE: HART: Bente Ma		•
CONTRACTOR: 29	ten croner, backhoes (2), D-3	
SPECIAL ORDERS /	FIELD CHANGES:	

114
MCIAren Hart

Mc <u>laren</u> Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:		DATE: PAGE	_ OF
ACTIVITIES: (Perrore had some of the for placed the for sorth well for of the ground of the local of the The local of the	to redictly two filters building int Time. Also de tones/works bushe in the place of to led between the of O and olso place with runoff re o 7-80 i and 7-302 then in the treats anti-Met which we morning there as	these wont en on leter from to we more parels. There was so to Max placed wo that we leid mine over al a arrived today. To text building.	Benteman Sente me some some some some some some some	I working of of the t in the re ground the side with were ot. loode

Mclaren Hart	PROJECT NAME: BR American PROJECT NO.: 07.08070566 PREPARED BY: RC Backen	DATE: 4-7-94 PAGE 1 OF 2
PROJECT DESCRIPTION	Vi SVE system	
WEATIER CONDITIONS	s: cold, snow last night	
WEATHER CONDITIONS		
SITE CONDITIONS:	swows covered appr 7" mud hereath.	i.t
PERSONNEL ON SITE HART: B Rodus	B Dollisio R. Backen J. Panko	
OTHER: AMA, DE	C, Donforth, Forguson Electric	
EQUIPMENT IN USE:		
CONTRACTOR: ha	d took	
SPECIAL ORDERS /	FIELD CHANGES:	



PROJECT NAME:	BP America	DATE:	4.7.04
PROJECT NO.:	07 080/056	PAGE	OF 2
PREPARED BY:	RC Brekin		

ACTIVITIES: Armed in wite at 0700. Cerrones laborery and is of the of operators on all because of the amount of anon we got last lan Bentement I was sendin it back inter commen about the nover the treatment cho plu ancho serous in an approved down very cler and he gove me a con after whereh Jun at Teldmin Barrel and reserved a cost of 5.00 per drum. At 1130 I removed the guts also the 99 سب 11 the



PROJECT NAME: BP America DATE: 4-7-94 PROJECT NO.: 090901076 PAGE 3 OF 3

PREPARED BY: RC Becker

ACTIVITIES: turned them of for several quinter then turning them on again for several mighter repeating this oscience of an operal times then quot left them on .
on again for several minutes repeating this serverce of
two Then good left them on.
Using Cenones submerfulls army of pumped water from the draining
ditthe near Lake Course surpin the water to the other and of the
relient this pump now from 1200 until Bruke turned it of
1700 - We have good drawing from cround the treatment building
you are a good sover not load in the south well field is
definition clower drawage there but when the rest of the well held
is excised it will improve Today was the first of time I think
I extually now water drawn from the constigued we must be
doing weather night.
Cerime in schooluled to long sentent tomorns I have 15 and
here the operator desting at stock the east of the convertito at 0800 That
will give VI wie to pring some water and the operator a species
to year the eastern and well field.

Mclaren Hart	PROJECT NAME: PREPARED BY:	DATE:
PROJECT DESCRIPTION	4: <u>56 octo-</u>	
WEATHER CONDITIONS	: _ sold skows som but night	
SIE CONDITIONS:	mudely ust says according to	
PERSONNEL ON SITE:		
	B. Dilien, T. Prake R. Becken	
OTHER: HAIR BR	Coscone Derforth, Fayron	
EQUIPMENT IN USE:	plections.	•
CONTRACTOR: hak	the (2), 25 the come DE down	

SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME: PAGE PAGE PAGE PAGE

ACTIVITIES:
Lord brut that they in the court word and art or the instruct
enterines conditions of stated on piece I as muchle and well
mendoles wile are splacing bent that in the new because we need
a north our face to call to the exists call when we start Translit
in the west and. We have and and but that over any men (consis)
in visit which have me stable have become Note my help to explore
for under crowned ut Ditto last ball and winter and nower experter
workfilled. Mark Cerone mored a took gill of soil near
the VES trade while was partially blocking the pathway to
for the signing and also suproved the drawing in the area of the VES
to the sign and also improved the drawings in the area of the VES. Italian Mark also presided an over of the south well healt as continued
to the east some of the follow building or we seem made to that one
the towner manner.
The collect today at app. 1550 about the best time to next with
Keven Clase of the DEC tomorrow, of get upper 12 hours notice, they wend
well to.
Dangoth worked on the fistory building value box work for a short
period of time in the worth well field and did some plumbing in
the building form the pumps out to the air strippers.
- ferres had three men on arts today

Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: R.C. Bocker	DATE: <u>4-5-94</u> PAGE <u>1</u> OF <u>2</u>
PROJECT DESCRIPTION	N: SVE system	
WEATHER CONDITIONS	s: warm, sunny	
SITE CONDITIONS:	ivet, muddy	
	R. Delisio, J. Panko, R. Becken rone, Ferguson, Danforth	
EQUIPMENT IN USE: HART: Bentomat	<u>ruggin-g</u>	•
	FIELD CHANGES:	

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PROJECT NAME:	BP America	DATE:	4-5-94
PROJECT NO.:	090801056	PAGE	2 OF 2
	DC Bala	•	

ACTIVITIES:
Merrone has two crews on site again today one crew worked on
the cutting and removing of the concrete found westerday during The
conduit trending that took sugar 4 lows to do then they finish
treaching the rest of the line. Reef And was cut for the bottom of the
treach and placed then the sand bed, then the conduct them down
again, then the keep land, was that folded over the top and backfilled.
Cillie degging the backhoe bit another underground electrical like unknown
The anyone are again we were very lucky noboling got hunt.
H+A seems to their its the yearer and control line for the P3 + P4.
This second crew laid two ponels of Bertonat in the southwest
arean than covered that then moved to the east and of the felters
building to start layer Bertonat to and into the country of because
of the and muddy condition we had to work from the pavement out
into the courtyday. We laid three panels from the powerest north
Towards the production building then covered these pauls with stone
appr. 18" because we will have to drive the crane out outs this
woodway and so here continue working off of it . While there
parelo were being covered we laid 3 parelo from the pavement
scouth towards the cabove ground ground water line after which this
was covered with stone also. While the stone cover was being laid
The laborer cleared up the site loaded the trailer for Tomorrow broke
off grout around wills which had heaved from foot al general
ant reads for Tomorrow also as lake hale I have the
Donforth worked on giping in the north well field plus the
filters building value box and instilled the heat opphanger in
the treatment building -
- Terguson laid this conduct in the trench which Bob had
completed some on the porthwest comes of the filters building.
I had a Verguson employee turn off the power to the treatment
- I had a terguson employee turn of the sower to the treatment - building so we could softly work under the power line powering
the treatment bullding.

PROJECT NAME: BP America PROJECT NO.: 09.0801056 PREPARED BY: R C Becken	DATE: 4-4-94 PAGE 1 OF 2
PROJECT DESCRIPTION: SUE system WEATHER CONDITIONS: windy, cool, sunny	
SITE CONDITIONS: wet, snow melting from yesterday PERSONNEL ON SITE: HART: B-Radus, B. Delisio, J. Parko, R. Berken	
OTHER: M+A, Cerrone, Danforth, Flerguson EQUIPMENT IN USE:	
HART: Bentomat rigging CONTRACTOR: backhoe, 28 ton crane, D-3.	
SPECIAL ORDERS / FIELD CHANGES:	



PROJECT NAME: BP America DATE: 4-4-94 PROJECT NO.: 090801056

PREPARED BY: RC Becken

PAGE ____ 2_ OF 2

ACTIVITIES: Danforth laid out name lines in the north well area plus continued work on the filters building value
area plus continued work on the dilton building value
shed headers etc.
Forguson Electric hal two men on wite they were working
on conduit extens of the treatment building.
Corrone had two crows on ate one trenching the conduct
Trench from PWZ to the south west comes of the filters builden.
About half way between the corner of the felters building and Pwt
we lit a concrete pad just below the surface of the
ground approx 8'x15'. We found this at 1415, it was quiting
time before we found out what to do there we will be cutting
. The concrete and remove the portion we need to move, we still
need to decide what to do with the concrete we remove. The other
crew streets dealt with the Bents Mot first unloading the traitor
trader truck load then place 8 rolls on the a Cerrone trailer the
rest of the load was stockpiled on the driveway on the south saide of
the north well field. after lunch we laid sollo of sentomot
in the south west area then covered it with stone. We also gamped
the standing water from the drainage ditch new Lake Cerrone
Brien ; Bob and I decided that trending will begin in the west
area when Bob to finishes the trench he working on now. I
will lay the too remaining panels neaded in the south west mea
then lay two panels from the road on the east side of the filters
bulding to the exsitu sell then cover it with 16"-18" of \$1 ROC
so we can use this washway to get contaminated soil to the
exite all. after that we will start in the south area on the east
and working west word.

DAILY FIELD ACTIVITY LOG PROJECT NAME: BP Funerica DATE: 3-31-94 PROJECT NO.: 09.0801056 PAGE 1 OF 2 PREPARED BY: RC Becken
PROJECT DESCRIPTION: SVE system
WEATHER CONDITIONS: windy, cool, sunny
SITE CONDITIONS: wet but drying
PERSONNEL ON SITE: HART: B. Radus, B. Delisio, M. D'Eufimia, R. Becken
OTHER: H+A, Cerrone, Donforth, Ferguson EQUIPMENT IN USE:
CONTRACTOR: Cat 225, backhoes (2), D-3, 28 for crane.
SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME:	BP Aneira	DATE:	3-31-94
PROJECT NO .:		PAGE	2 of 2
PREPARED BY:	Rc Becken	-	

. 1
ACTIVITIES: Cerrone had these separate tasks going on today,
But supervised one crew in the south area trenching for conduct
and placing concrete pade for air blowers also installed was
concrete manholes (pole bores) and water was pumped from
the south area and Lake Cerrone, appro 1,000 gall of stood water
was sumped from these two areas in the lose it would
was sumped from these two areas in the lope it would speed up the drying. A second Cerrone new was supervised
by Mike in the west area it saw out pavement for later
Trenching. It had a problem in that they didn't drain thier
water hoses the night before and they were all frozen this
morning. The last crew laid Bentomat in the north well
. field which by the end of the day was completed and covered
We have three and one half rolls of Berto Mot left for Tomorrow
and my order was delayed it more won't arrive intil
Monday AM. it was being loaded this afternoon so rother than
have a problem again I order the third load already
I was told it would arrive next Friday April 8.
Recieved the leat Erchanger today.
Terqueon had two men on site laying conduit in the above
mentioned trenches and assisting in the placement of the pole
bops, they also finished the conduit into PW-2 so that truck
can mow be backfilled and a piece of Bents Mat patch laid
over it
Danforth making progress on the VES trailer extension

Mclaren Hart	PROJECT NAME: PROJECT NO.:	BP America 090501056 RC Becken	DATE:	-
PROJECT DESCRIPTIO	ON: SUE syste			
WEATHER CONDITION	IS: <u>Cool</u> , sunnu	1 then light snow in	late afternoon	
SITE CONDITIONS:	drying but still	meddy		
ł	M.D'Eufinia	R. Becken B. Delisio		
EQUIPMENT IN USE:		Danforth, Nuagara 1	uping	
HART: Bento Man	t rigging	Khoe, (at 225, D.3		
SPECIAL ORDERS /	FIELD CHANGES:			



PROJECT NAME:	BP America	DATE: <u>3-31-94</u>
PROJECT NO .:	09080/056	PAGE OF 7-
PREPARED BY:	Re Beaken	

ACTIVITIES:
Cerrone laid Bentowat in the mosth well area with no
problems encounters except that placing 3" of stone cover is
pretty this in soft muddy near. We have to patch the
Bento Max in Sour areas where we either hit it with the D-3
blade or the trackes grabbed it there are will have In my
spinion 3" is too thin. Cerrone also had one man our cutting
in the west area parementapps 3/3 of it is done. Mark Cerrone
and one laborer are backfilling transhes for the GWS and conduit
also digging treaches for conduit: Rape to Boka field notes for more
. Lerguson had one man on site he laid conduit in the above
mentioned Withches.
Margan Piping on site with one man he finished up the gotable water live only the installation of the sinks and toilet are left and they haven't been purchased yet. Dauforth prefabling well heads and plumbed to some of the purchase.
water line only the installation of the sinks and toilet are left
and they haven't been purchased yet.
Vanforth prefabling well heads and plumber to some of the
Jungo.

Mclaren	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: RC Becken	DATE: 3-29-94 PAGE 1 OF 2
PROJECT DESCRIPTIO	ON: SVE system	
WEATHER CONDITION	15: cool, rain & snow after lunch	
SITE CONDITIONS:	wet meddy	
PERSONNEL ON SITE	m. Ditufinia, B. Delisio, R. Becken	
OTHER: H+A, Ce	rrone, Donforth, Ferguson, Nugara Pil	h the
	ricging	•
CONTRACTOR: _ba.	(Khoe, Cat 225, D-3, crane (28 ton)	
SPECIAL ORDERS /	/ FIELD CHANGES:	



PROJECT NAME:	BP America	DATE:	3-29-14
PROJECT NO .:		PAGE	2 OF 2
PREPARED BY:	Rc Becken		

ACTIVITIES:
Cerrone working on three superorte tasks today one man was can
cutting in the west proved area Mila D'Enfinion was there wotaling and
monitory for dust and voilites. At appropriate it was and decided
that water was readed to cut down on dust being generatedo
Alores cowere new from the filter building and water was rised the rost of the
day. Two men worked with sot on trucking a I backfelling all work
There was done in the clear your and also occomplished was the placement
of one blower pad. The last and largest was laid Bentomet in the north
well field as we did yesterday were worked east to west and varaged
to get six panels each 12' wich done and covered. We had some minor
. labor problems today 1. hazard pay becomes of the wearing of tyrek 2 operation
taken to long to cover. I spoke to now williams and Mike Cenone about
earl of these and they will hould the operators and their comment on
the hazard pay was if we paid typek werent needed then they werent
entitled to would pay. The major alow down in laying Bests not is
bring the rolls from the stockpile to the crane we have a lot of
tooble putter the gips themat the roll is most cases, This will
be dinanoted by placement the next load of Bentomot on the road
to some place flat and frim unlike soil.
Danforth continued piper for the EWS plus enstalled to five home
bibs and cut and step set up the necessary fitting for the well botton
Jerguson continued working on the conduct from the treatast building
to the south area.
Corporate on site builder the addition to the VES trailer.

PROJECT NAME: BP America PROJECT NO.: 09 0800 1056 PREPARED BY: RC Becken	DATE: 3-28-94 PAGE 1 OF Z
PROJECT DESCRIPTION: SVE system	
WEATHER CONDITIONS: sool sunny	
SITE CONDITIONS: wet rain yesterday + last night	
PERSONNEL ON SITE: HART: B. Delisio, R. Becken, M. D'Eufimea	
OTHER: H+A; Cerrone, Danforth, Ferguson EQUIPMENT IN USE:	
CONTRACTOR: 28 ton crane, backhoe, Cat 225	
SPECIAL ORDERS / FIELD CHANGES:	



PROJECT NAME: BP America DATE: 3-28-94

PROJECT NO.: 090801056 PAGE Z OFZ

PREPARED BY: RC Becker

ACTIVITIES:
Cerrone one site one operator + laborer backfilling tranch on
north side of the treatment building and punging water from the
Treach. The roat of the treach was backfilled to the top layer of
sand covering the GW pipes then of tenguous laid the conduits
which would go from the treatment building to the various points
south of the filters building. The rest of Carrows area laid
Sentant in the north well field starter at the eastern side working
westerned. With the late start we had become chortest
us two laborers we still managed to lay 4 pouls in appr.
4800 so ft. and cover it. This orea was the lowest sport and
wettest in the north well field, it also had the most obstickle
to cut and gatch around is &PWZ storm sever blower pad.
We used + #1 ROC for cover and I to think it will work fine
it appear that if we use a 18" layer of \$ 1 ROC we can
back the loaded dupo trucky right out outs the well field
without rutting or domaining the Bents Mot, which tells me we
could probably do the some with the crown if needed. We
brought in 14 loads of \$1 RDC today all but one load was used
for cover the other load was well for the trench.
We received an air compressor today which Danforth unloaded
and placed in the treatment building. Dougath also pressure
Testol the GW lines to 50 psi with me grobles
Dur samples which Mik + I took on Frida and shipped were us
delivered as the shipping papers stated as we weren't able to get
any results today the late said we will have results tomorrow.
<u>. </u>

Mclaren	PROJECT NAME: Scherol C Backen PROJECT NO.: 09 080 1056 PREPARED BY: R. C Bocken	DATE:	
PROJECT DESCRIPTIO	N: <u>SVE system</u>		-
WEATHER CONDITIONS	s: dry, windy, cool		
SITE CONDITIONS:	wet, muddy		
PERSONNEL ON SITE	ma R. Becken, B. Delisio		
	anforth, Courone, Ferguson		
EQUIPMENT IN USE:		•	
CONTRACTOR:Ca	t 225, backhoe, D-3		
SPECIAL ORDERS /	FIELD CHANGES:		

114
Mclaren Hart

DALLI	FIELD ACTIVITIES		,
PROJECT NAME:	BP America	DATE:	3-28-94
PROJECT NO .:	090801056	PAGE	2 OF 2
PREPARED BY:	Ri Becker		

ACTIVITES:
Donforth laid the groundwater pipe from the treatment building to the PW-1. Also got the gas heaters working in the treatment building.
I all'
building
Carrone senished degging the treach up to the PW-1 of ten the pipe
was laid it was covered internettently with said to had the
give from floating. The VES haulen was moved west appr. 10' and
south app. 2'. Cerrone worked in the pouth west area preparing it
for Bentonal. Three loads of soul were brought in.
· V
- former transfer of the second secon
treatment building over to the Pole box on the south suite of the
warmen wereday wer to the Tole box on the south saile of the
filters building this should be done on Monday.
Mike and I took composite samples of each of the two areas that
Wife and I took composite samples of each of the two areas that we covered with potentially contaminated south poil on last Monday. The
composite samples were taken at each corner al the center of the area.
also taken are was one composite soundle from the make Out.
Alos taken are was one composite souple from the parking lot where the soil was stockfilled. See attacked drawing for neasurement and
nove detail.
- American Company

	DATE	— — McLAREN / HART	SHEETOF	PAGE
SUBJECT			DB NO	
ВИ	3		Shower R	3ld·
		Area 1 8		2'
		Roadway	least i	Tat the forting

DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America DATE: 3-24-94 PROJECT NO.: 690801056 PAGE 1 OF 2 PREPARED BY: RC Becken
PROJECT DESCRIPTION: SVE system
WEATHER CONDITIONS: rain for a short while then nice sunny, windy warm good dring weather
SITE CONDITIONS: wet, water everywhere
PERSONNEL ON SITE: HART: M. D'EUFIMIA, B. Delisio, R. Beiken OTHER: N+A, Cerrone, Donfarth Ferguson
EQUIPMENT IN USE: HART: None
CONTRACTOR: Cat 225, D-3, backhoe
SPECIAL ORDERS / FIELD CHANGES:

. . .



PROJECT NAME:	BP America	_ DATE:	3-24-94	
PROJECT NO .:	090801056	PAGE	OF	٠ 2
PREPARED BY:	R C Becken	_		<u></u>

ACTIVITIES:
Dougoth received more gipe today, also laid pipe from the treatment building to the existing above groundwater line. The pipe was
treatment building to the existing above groundwater ling. The pipe was
placed in the trench and glued them left positioned out of the
bottom of the trench (were there was water) for apper. I have
for glue to dry then positioned into the bottom of the trench and
covered with a bucket of cand every so Then to hold the
pipe down, it will be tested to tourne morning.
Jerguson had one man on site he worked on the electrical
lines which will come out of the west side of the building and
rum under ground to the pole box south of the fellers building.
Donforth also removed the a pump from P-2 for N+A which
they cent appr, 4 hours to godo.
Clume had one non saw cutting the pavement on the west saile
of the filters huilding. One operator a cleaned up the north well
field were the trenching was done yester day then dressed up the
swest side of the treatment building to try and direct sum of
around the south side of the williality VJ and the other
operator worked on the treath from the treatment building to the
existent above ground water line we had to use two gamps to
keep the water out of the trench and and also because a great
deal of this brench was in the driveway we acraped the stone arm
for future use then we duy the sort and loaded directly of a
dup truck which was then dumped on a stockpile on rear the
edge of the wet lands.
There are some serious issues about the over soil being contaminated
because of a whien on the wenty. & Mike D + I are certain this came from
the parking lot but we will as requested by Mott Plant take a composit
sample tomorrow from the two areas which we spread this natural in also we
will get a sample of the parking lots which will be extracted then achived
at the lab for possibly future use.

Mclaren Hart		BP America 090801056 R C Becken	DATE: 3-23-94 PAGE1 OF 2
PROJECT DESCRIPTION	N: <u>SVE S</u> L	isten	
WEATHER CONDITIONS	s: <u>nice</u> sur	m, light breeze ap	a 55°
SITE CONDITIONS:	set, muddy		
PERSONNEL ON SITE HART: M. D'EUFI OTHER: LIPA, C	mia, B. Delis		
EQUIPMENT IN USE:		, and the second	•
CONTRACTOR: bock	thoe (2), Cat	215	
SPECIAL ORDERS /	FIELD CHANGES:		
5			



PROJECT NAME: BP America: DATE: 3-23-94

PROJECT NO.: 090801056 PAGE Z OF Z

PREPARED BY: RC Becken

ACTIVITIES:
Cerrone had two laborers and two operators on site one crew
worked at training in the north east come of the north well field
from the blower pad to the cut across the word placing conduit in
the trench. The trench was duy appr. 2'z feet deep with a 6" layer
of sand placed in the bottom them the conduits them 6" of cand
on top of the conduit then the same soil that had been removed
was used to balkfill the only exception was in the wand where
Az ROC was used. Bot D. made the decision not to me waap the
conduit and sand because of a serious influt of water ground + surface
running into the trench, he thought it was better to just get the
conduit in and sovered.
Danforth had a load of PUC pipe come in This morning
The diver of the truck pulled of the road outside the gate and such in the med. Corrowe tried to gull him out but we were afraid
suck in the med. Cerrone tried to gull him out but we were afraid
the truck would tip over. Danforth had to unload the trailer from
outside the gate and then bring it is on sits this took then most of
the morning. Donforth also prefabled some pips where it will troso
COR NO COROL IN
Gergian as mentioned above anotalled the conduct in the
noth well field.

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 09 0801056 PREPARED BY: RC Becken	_ DATE: _ PAGE	3-22-94 1 OF Z
PROJECT DESCRIPTION	DN: <u>SUE system</u>		
WEATHER CONDITION	S: nice, cool, sunny, windy Parfect dring weather		
SITE CONDITIONS:	wet, muddy		
	nia R. Bocken, B. Delisio Danforth, Ferguson		
	FIELD CHANGES:		



PROJECT NAME:	BP America	DATE:	3-22-94
PROJECT NO .:	690801056	PAGE	<u> このF ユ</u>
PREPARED BY:	R.C. Becken		

ACTIVITIES:
Cerrone not on site today everything to wet weather is good for
drying sunny wendy app. 450, Bob Mike and I layed out some of the
trench in the west paved area as sow cutting could start today we
also noved a good deal of the Metusling fink which would have been
in our way nother them wait forever for Metuallie to do it While
laying out trench Bob hit his thunk on his left hand with the
hospital for an &X Ray and a tatmeron shot. The remainder of the
tranches will have to be laided out townson, we have enough done
more to keep a gruy busy for most of tomorrow. Bot i I ded some
calulations to try and deletimine how much more expressive stone cover
will be than soil and given the fact that the stone will go down
Sparter of don't think the store would be that much arose expensive. Cenne
has agreed to let us have operators for 4 hours yet day, even though the
Corner else lovered dis serie on star de good for deluvered to 8.75/to
Cerrone also lowered his price on stone from 9.00/ton delivered to 8.75/ton delivered.
Dougoth worked on the VES trailer today and some additional yelumbing
Darforth worked on the VES trailer today and some additional your inside the treatment building. This lond of pipe is now askedular for
tomorrow.
- Terguson working on site bringing the conduct through the west side
of the treatment building there conduits will be for pover and
Antrolo running to a gook box on the south saide of the filters building

MCIaren Hart	PROJECT NAME:	FIELD ACTIVITY LA BP America 090801056 RC Becken	DATE:	3-21-94 1 of 2
	ON: SVE SYST	fum		
EATHER CONDITION	1s:rain			
ITE CONDITIONS: _	water, water	every where		
ERSONNEL ON SIT	E:			
	nia, B. Delisio rne, larmo Euri	ronmental, Danforte	Jerguson	
EQUIPMENT IN USE			•	
CONTRACTOR: _bea	ckhoe, D-3, 28	ton crane		
SPECIAL ORDERS /	/ FIELD CHANGES: _			



PROJECT NAME:	BP America	DATE:	3-21-94
PROJECT NO .:	09 080 1056	PAGE	
PREPARED BY:	RC Backen		

ACTIVITIES:
Danforth a site working in the treatment building they were hanging
copper water line, gas line and working on the trailer. Denforte reach
the trailer world away from the builders another 9' and appr. 2' towards
the back of the building.
Ferguson Flecture had one was on site and he was working on the
four lines that exit the west side or the treatment building.
Water was remining inale the building through the west door this
afternoon the sump (west) was almost full of water which we placed
a sump pump in to empty Drawage is terrible by the building on I
have said since I arrived on site on Nov 2. This is a major problem
ground to start with the the top soil was scraped off to make it
ground to start with the the top soil was scraped off to make it
Cerrone started laying Bentomat at appr. 0900 today we head 4
parels de laid by noon it was naming lightly before lunch them after
lunch we got & hit withy a down pour so Joe Carnel said we should
stop laying Bentoant and get what we have down covered. The
cover soil turned to along almost immediately after we uncovered
it became it was some raining so hand and the fact that the seas
to be covered were low areas and all the storm raways was runis
right in it and panding because of the Bentomat. I made the decision
not to try and law Bentomat tomorrow even though the weather is
supposed to be nice because we can't get good drey cover soil. The area we
world be working in will probably be fine to work in but we can't lay
material unless we can cover it. There was a shein on the water men
of the cover soils of me not sure it it is from the equipment or the
parking lot where we had the cover soil stockpiled the analytical well end confirm if the cover has to be removed. But and I talked to matt
and confirm if the cover has to be removed. But and I talked to Matt
al bein until almost 1900 last night trung to get them to realize the
soil is not the answer for a cover material we need to use motore
then we can work everyday unless there is a downpour. also there is concer
then we can work everyday unless there is a downpour. Also there is concer from Danforth about piping being supported by this soil or lack of supported
for it. Cost and having to explain to Don Longshow when we now wont to see stone
for it. Cost and having to explain to Don Longshow why we now want to see stone walked of soll seems to be a problem with Pittolingh.
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Mclaren Hart		FIELD ACTIVITY LOG BP America 09 080 105 6 R C Becken	DATE: 8-18-94 PAGE 1 OF Z
PROJECT DESCRIPTION	N: SVE sys	tem	
WEATHER CONDITIONS	s: cool, sno	ده	
SITE CONDITIONS:	Snow covered	<i>O</i>	
_	M. Plantz, R	Becken, M. D'Evfima,	
			
EQUIPMENT IN USE: HART: HNO CONTRACTOR: D	-3, backhoe		•

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AMA
Mc <u>laren</u> Hart

	PROJECT NAME:	BP Anerica	DATE: <u>3-18-</u>	94
<u> </u>	PROJECT NO .:	0901056	PAGE	
MÇ <u>laren</u>	PREPARED BY:	Rc Becken		
Hart				
				
ACTIVITIES: Cerr	one had two	operators and	two labbrers they	Similar .
up the preserve	of the north	well hild	aga plus install	
one blower is	and in the wa	theast comer of	the area. Glas	eight
l= 1 = 1 cove	a man' mere	delivered The blever	and was placed or	- arear.
bu de la	· Decree to D	the the tree	and a the end	1314
S"	sou compacture	and the same	area plus motates of the area. Glace or partare of the part	
appl 8 .	7. 09.	2 1 - 2145	1-1-0	
Dongo	a a reveree &	book & PVC Page	fittings hung of	ma
pipe in the bull	talling and lun	ned on the	natural ges to	the
heaters which	we found	out the pressure	was to ligh it a	appir
5 psi it should	2 he .5 psi -			
Lerguso	n Electric re	cieve a boal	of PVC conduct a	I Shabut
Bot and Brion	mere in a med	The with League	ion most of the of	an .
		,	.	0
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Mclaren Hart	PROJECT NAME: _	X10X01056	OATE: 3-17-94 PAGE 1 OF 2
PROJECT DESCRIPTI	ON: SVE syste	p	
WEATHER CONDITION	1s: Sinny nent		
SITE CONDITIONS:	recoved was	enew last night b	net melting to an
Dhabad		Talicia, C. Bake	M. Plantz
EQUIPMENT IN USE:			
	Kine, D-2 dozer		
SPECIAL ORDERS /	FIELD CHANGES:		
	·	·	

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MCIAMA	DAILY F. PROJECT NAME: _ PROJECT NO.: _ PREPARED BY: _	070807356	LOG DATE: 3- PAGE	
installed (proced of afficient some constant ordered tomorrows and a well field. I a	Thatie contra meters work on timed work I the govern tockpiled along lso ordered	on the way soil twelve by the drive way	he heaten the	the thermisates where I he month
about haveng e fen dags I after Metuslin problem which and through diverting and	Sue Kople on mylorge vehicle all glace bar we well be Carboundering Cerrone with	I regalf had a parties in the per baring unles to the provide bar Don Langshaw	in the afternoon	etal tright traffic traffic around be this

BP SITE VISIT MARCH 17, 1994 1:00 - 3:00 P.M.

AGENDA ITEMS

- 1. HOPPER RELOCATION (EX-SITU CELL) 95% sure it won't happen gen Fruit Reity
- 2. ELECTRICAL SCHEDULE/POWER LAYOUT
 - * SHIELDING OF CABLES
 - * STATUS OF SUBCONTRACTOR PROGRESS
 - * ELECTRICAL SCHEDULE
 - * GRS INTEGRATION ISSUES LEFT UNRESOLVED /
- 3. TAX EXEMPT STATUS wait happen per associating M/H
- 4. GENERAL CONSTRUCTION SCHEDULE- SEQUENCING OF OPERATIONS Benteret installation, trenching for underground giping, underground + above ground paging
- 5. PROJECT CHANGE ORDERS

 - * FILTERS BUILDING agreement by Brien . Down Puty of H.A.

 * ACTION PLAN FOR OUTSTANDING PCO's will have then by and of March per Brien
- 6. INVOICE ISSUES
 - * RESUBMITTAL OF FEBRUARY INVOICE (CONSTRUCTION INDIRECTS)
 - SHORTENING THE INVOICE CYCLE may invoice be morthly on when large many
- 7. MISCELLANEOUS/OUTSTANDING ISSUES
 - LOCATION OF DECON PAD
 - * STORMWATER DRAINAGE ISSUES (SPDES/COVER TIE-IN, ETC.) 🗸
 - * H&A AS-BUILTS ON PW-1 AND PW-2 STATUS 🖊
 - * EXTERIOR TRENCHING PROCEDURES
 - * PUMP EFFICIENCIES AT PW-2 RESOLVED? <
 - * O&M PLAN SUBMITTAL 🗸
 - * IMPORTING FILL MATERIAL/BENTOMAT LINER SCHEDULE Start fiel delivery 300 3-76
 - * NYSDEC COMMENTS ON WORK PLANS- FINAL??
 - MECHANICAL SUBSTITUTIONS (VICTAULIC COUPLINGS/BALL VALVES)
- 8. PLANNING FOR NEXT PROJECT REVIEW MEETING

Mclaren Hart	PROJECT NAME: BP RMERICA PROJECT NO.: 090801056 PREPARED BY: RC Becken	
PROJECT DESCRIPTION	ON: <u>SVE systam</u>	
WEATHER CONDITION	1s: <u>Syow on + off cold</u>	
	·	
SITE CONDITIONS:	snow covered	
		
	•	
PERSONNEL ON SITE HART: 13 Dela	sie M. D'EUFINIA, R. Becken	
OTHER: 11-12 To	SP, Danforth, Ferguson, Cerrone	
	17 rough rin, perguson, Cerrone	·
EQUIPMENT IN USE:		•
CONTRACTOR:D-	3 dozer, Cat 225	
SPECIAL ORDERS /	FIELD CHANGES:	,
		-
	•	
		•

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MCIArer Hart	7

PROJECT NAME:	BPAMERICA	DATE: 3-16-94
PROJECT NO .:	090801056	PAGE 7- OF 7-
PREDARED BY	RC Bocker	

ACTIVITIES: Itday in the day Mr. Don't of the DEC in to make his
comments at one the homor soils analytical at upps 1500 Sue
of NAA told is that Mosta Down had one consen men the
Fe unding received but couldn't may it was good or bad. of
informed the that until Dox Langelow said the soil was OR
- I was not grown to oto t howling it or site this I reviewed on a
17156 Don here a part history of grandering with everything that Marty sain
Dy the the in received word from our abouts Done Ok it was
to late to get Corrose to start has any the sent
was concerned as to the weather its answing like cray again
y I bring not on site and don't use it within a day its licite
to spiene into unusable thinks of soil (whom down Die I do and
'damed if I don't.)
Bot and I met with Ear Reason and Don Freedman about up coming
and the mark the mertanak reseasons for totranch work in
the west proved area by next wednesday at the Outst 1
if we call start breaking, I said we could start you cutter
the property of a soully of soully of the
material and on site I intorned few of this right the
(ADMACLE) (ADMACLE) AND ALLOW TO THE ADMACLE AND ALLOW THE ADMACLE
for equipment to arrive on site of then use the inside work for
filling when its to migerally to work outside of have no problem
at all with this except if we are laying Bentemat on P trought and provide working in the building also it will need extra MIH
personnel.
GFC was on site today they dured were 200 it
well field (month east comes) belief we used to cover ouished run
which was in that area and also fill holes and nuts. This probably
The state of the s
it my amintale. Danforth continued wother and a la se and spreading
it my amintale. Danforth continued installing pipe langue and Slip-flogged two
terqueta continued wine heaters - prouser also wind the ? He
on the bettern pump in First this exercised the pump contact directions of

114	PROJECT NAME: BP America	
M <u>claren</u> Hart	PROJECT NO.: 070801056 PREPARED BY: Z C Becken	PAGE OF _Z
ROJECT DESCRIPTIO	N: SVE system	
WEATHER CONDITIONS	s: rain cool, overcast	
RITE CONDITIONS:	set, myddy	
		•
PERSONNEL ON SITES	Amia, B. B. Dolisia, R. Beaken	
THER: NYA, FE	guso, Donforth, Cerrone	
QUIPMENT IN USE:		•
	, backhoe	
PECIAL ORDERS / I	TELD CHANGES:	

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114
Mclaren Hart

DAILY	FIELD ACTIVITY LOG		
PROJECT NAME:	BPAMERICA	_ DATE: _	3.15.94
	09 080:086	_ PAGE _	シ OF シ
PREPARED BY:	Rc Becken	_	
			
	_		

ACTIVITIES:
derawon shad we may a wite and to do to
Herouse had me mon or kite app. Ve dow he was going to
in the feature of the state of the grantene.
Destate 1.1 to it is it is
Douboth had two men on site they attituded harour supports for overhead pipe is gipe larger, also installed the 3d copper line (water) for the possess wenter.
(ti) I the first target and autilial the souper line
- Walth of the property would .
Carried and the
Cerrone continued grapping the month area for installation
the state of the server of the words hales and
of Certament ei the germeter outr and filling the words hales and
the intorned me that because the work to to
was doning was intrusted and in the zone of contamination they
should be wearing typek which means an extra 6.50 / he bound for I couldn't arque to fact best it is a little rediculor.
for I couldn't argue to fact best it is a little redicular.

, · · .

Mc <u>laren</u> Hart	PROJECT NAME: BP America PROJECT NO.: 09 050 1056 PREPARED BY: R C Beclen	DATE: 3/14/94 PAGE 1 OF 2
PROJECT DESCRIPTI	ION: SVE system	
MEATHER CONDITION	NS: cost, overcost	
THE CONDITIONS:	snow ice covered	
ART: M. DIE	efina, R. Becken	
THER: MAA,	efina, R. Becken Danforth, Cerrone, Viagara Pipin	
OTHER: MAA, QUIPMENT IN USE	Janforth, Cerrone, Niagara Pipin tomat rigging	
QUIPMENT IN USE	Danforth, Cerrone, Viagara Pipin utomat rigging	

· :



PROJECT NAME:	BP America	DATE:
PROJECT NO .:	090881056	PAGE 7. OF 7
DOCDADED DV		

Mclaren Hart	PROJECT NAME: BY AMERICA PROJECT NO.: OG OBOJOSTA PREPARED BY: PC Becken	DATE: PAGE .	3-71-94 1 OF <u>7-</u>
PROJECT DESCRIPTIO	N: SVE SYFET		
WEATHER CONDITIONS	s: sanny, clear, cool		
SITE CONDITIONS:	enou coneral		
PERSONNEL ON SITE:	·		
		•	
HART: K. Bown	gertner M. D'Enfinia, R. Becker		
HART: K. Bown			
HART: K. Baym. DTHER: HAR Day CQUIPMENT IN USE:	gentuer, M. D'Enfinier, R. Becker eforth, Engine Soil, Cerrone		
HART: K. Baym. DITHER: HART Day COUIPMENT IN USE: HART: HARD LEL	gentuer, M. D'Enfinier, R. Becker eforth, Engine Soil, Cerrone		
HART: K. Baym. DTHER: HAR Day GOUIPMENT IN USE: HART: HAS LEL CONTRACTOR: DA	gertner M. D'Enfinier, R. Becker eforth, Engine Soil, Cerrone hackhoe, rightender		
OTHER: K. Baym. OTHER: K. Baym. OUIPMENT IN USE: ART: KNS LEL ONTRACTOR: DA,	gertner M. D'Enfinier, R. Becker eforth, Engine Soil, Cerrone hackhoe, rightender		
HART: K. Baym. OTHER: HAR Day EQUIPMENT IN USE: HART: HAS LEL	gertner M. D'Enfinier, R. Becker eforth, Engine Soil, Cerrone hackhoe, rightender		

C



PROJECT NAME: BP America DATE: 3-11-94

PROJECT NO.: 09 080/056 PAGE 2- 0FZ

PREPARED BY: RC Bocker

ACTIVITIES: _ Cerrone for to
ACTIVITIES: Cerrone has the men or get one operate me foreman
some the northern most franches
the second cover this includes movement of the record
at t
they are working in the watch are along the northern most forming grayaring it for the restorest cover this includes movement of the server of the server but something the server but something the server but something the server for the server of the ser
- Company of the second of the
equipost they will then down how the sets by the and of the day. Down
States asked me if he could have the drill no on city to age. I work this
flat had trailer worded to have the rig is out of two questo the course will park the rig in our of the way
will part the min to the country
dull my had to be left and
dulling had to be left on the deem god so it would not that all it
Monday to fix it.
Donforth has there were or with they are still harging a liquing We received a sall has the their are still harging a liquing
the leaters. There are still having a liquing
(18 are a 12
We received a sell from Valery at John P. Place Inco concerning the Cerrone to have three men on site Monday morning. I packed alled from
Carrows + 1 111
to have there men on site Monday



.

Mclaren Hart	PROJECT NAME:	FIELD ACTIVITY LOG TOP AMERICAN OPENSOR Reckey	DATE:3-10 PAGE1	94 OF 2
PROJECT DESCRIPTION	SVE SUR	- Can		
WEATHER CONDITIONS:	heavy show	s last most warming y	r, Jear sunny	
SITE CONDITIONS:	ow melting,	wet snow covered		
PERSONNEL ON SITE: HART: M. D'ESGIMIN		putper, R. Becken		
EQUIPMENT IN USE: HART: HUS LEC CONTRACTOR: drill r	ia rie tende		•	
PECIAL ORDERS / FIEL				

111-4
Mc <u>laren</u> Härt

	PROJECT NAME:	RD America	DATE:	3 he191
Mclaren	PROJECT NO .:	09 0861080		OF 7
Hart	PREPARED BY:	RC Rectan		Vr <u></u>
, , , ca, c				
ACTIVITES:		· 1 D 11 2		
Intel in the	de sous se	wished the last two	wells today	both
were completed	1. In was is	of the felton hu	eding. The to	a well
exists not	. 1700, the	nished the last took of the finished the day of	decompany dress	e ista the
Da-do-T	he worked	the are let	,	
gas Dine the	y had too as	on site soain.	allalion and	associate D
- While En	year Soil was	dupen hum Ker vamples and of ope		
the exite call	these were bore	samples and of an	217 Memped	semple it
two of the str	in some of	tub aps.	an open sam	plac. I hult
We don't carre	12 septed led to	start prepare the a storm in which we note tomorrow to a	ea but we	120 della 0
Decame of las	t with priors	storm in which we	received as	es. 7-8"
· Charage is the	duled to be on	at tomorrow to	tant prep wo	rk.
	·			
			-	
		•		



DAILY	FIELD	ACTIVITY	IDG

Mclaren Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	EP America 09.0801056 RC Backen	DATE: PAGE	3-09-94 1 OF 2
PROJECT DESCRIPTION	l: <u>5VE' Syste</u> ,			
WEATHER CONDITIONS	: Show on toff	E, cold		
SITE CONDITIONS:	oul frozem again			
PERSONNEL ON SITE: HART: K. Baumga OTHER: HAA, Da		infinia, R. Becken		
GUIPMENT IN USE: IART: HIJU LEL				
CONTRACTOR: <u>drill</u>	19, hand tools			
PECIAL ORDERS / FIE	ID CHANGES:			



PROJECT NAME:	RP America	DATE: 3-09-94
PROJECT NO .:	09 0801056	
PREPARED BY:		PAGE OF 2

ACTIVITIES:
Tempire Soil was on-site drilling in the courtyand one
$\mathcal{L}_{\mathcal{A}}$
Darboth had two man son wite toolay the line to
5 remaining pumps from the other day and also werter at
Dougoth had two man on site today they finished monthly the 5 senances pumps from the other day and also started setting up
Ald a reeling with Ron Reagon, (on-site) Don Freedman Rus Rol
On the phone and myself to desires sourcers and speaking work.
the areas for Bentownt ei. the edges along the paved nounds, to auchon trenches telling followent to the paved nounds, to anchor
stock wiled on site on him to be
stockfilled on site or brought on site as needled.
The VES trailer arrived today and was placed on the gad.
J Jan Jan .

March 9 Sub-contractors Meeting

Concern of Fobo about growting gamps before piping to done, it spipes there's my ster.

All pumps one mounted as of now expect one.

Bob will call Aurora Pumps for more details as to line up of the motors/gamps.

Like Farkfill to do his plumbing.

Carl of Danforth will pubmit be for additional work in trailer.

CARC fitting ordered should arrive next Triday.

Perso motorized value well spee (Carl or lon).

Genry from Ferguson will be on seitt.

Mcc Reprid 11 or Reprid 18.

Thousformer May beginning of submitted for Mcc + transformer done on 3-9.

Some instrumentation will be received this week.

call Parkail his plunding work

•
Mclaren Hart
PROJECT DESCRIP

MClaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: RP America PROJECT NO.: 090801056 PREPARED BY: RC Recken	_ DATE: _ PAGE	3-8-9# 1 OF 2
	N: SVE System		
WEATHER CONDITIONS	s: windy, cold, snow on + off		
- ·	vet, muddy, some ice		
PERSONNEL ON SITE:	a, K. Baumgartner, R. Becken		
OTHER: H+A EN	pire Soils		
		•	
	rig		
SPECIAL ORDERS / FI	ELD CHANGES:		



ACTIVITIES:

DAILY FIELD ACTIVITY LOG	
and leaf vivia The M	
PPO FCT VID.	
PREPARED BY: RC Rocken PAGE 2 OF 2	
- Carl Con	
wells today (100 h)	
is well as to the	,
July Control of the Man I have the	•
really lumber) to atting in the	•
on the area.	•
	•
t on site.	•
on aite.	•
	•
	,
	•

114
Mclaren Hart

DAILY FIELD ACTIVITY LOG PROJECT NAME: BP Finerice. DATE: 3-7-94 PROJECT NO.: 070701056 PREPARED BY: RC Buken

PAGE _____ 0F 2__

PROJECT DESCRIPTION:SVE_system	
WEATHER CONDITIONS: overcast, mild	
- OVERCAS(, mild	
SITE CONDITIONS: wet muddy snow the med	time
	•
PERSONNEL ON SITE: HART: K. Bowngostner, R. Becken, M. D'E	ofinge.
OTHER: H. A. Empire Soils Denforth	
2/2/16/17	
EQUIPMENT IN USE: HART: KNU ←€€	•
CONTRACTOR: drill 1195	
SPECIAL ORDERS / FIELD CHANGES:	



PROJECT NAME:	BR America	DATE: 3-8-74
PROJECT NO .:	090801056	
PREPARED BY:		PAGEOF

ACTIVITIES:
felter buld's one crow dulled to its countyerd and sent of the
flet hald's one crow drilled 5 well as the 11 west of the
approved all course will the Martin D'
nort to the write all do with the charpeon of two wells
- With the hand to
are here or all at this time, primer P. 803 A + R and 5866 A B, + C
were mounted to this part.
philes trole we men to Cerrone barrow over to look at the
large stone wouldn't be that well along in it large and small, the
large stone wouldn't be that much of a grader but the smaller sets will only be removed by screening which is a 2 2
ister rould only be removed by arrening which would be impossible
This problem as he would find not a companied Centre
of this proble al he would find nother source. Norm called
Trontier Stone which Sue Days and I a last in Contract of
als sampled This is a 20 1
all suppled. This will would be sure because its natural that is the late of the place or In formille to get dry material, also very little stone in
the sid! also very little stone in



DAILY	FIELD	ACTIVITY	LOG
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	PROJECT NAME:	BP America.	OATE:	3-03-74
Mc <u>laren</u> Hart	PREPARED BY:	P. C. Becken	PAGE	1 OF 2
PROJECT DESCRIPTION	: SVE syste	2		
WEATHER CONDITIONS:	cleur, sunny	nue ~40°		
SITE CONDITIONS:	non) ties comerce	I but melting		
PERSONNEL ON SITE:	itren, M. D'E	efinia, R. Becken	•	
OTHER: HAR EMP		'		
GUIPMENT IN USE: IART: _ ドルッ ここに				
ONTRACTOR: _drill r	71 6			
		·		



PROJECT NAME: B? America DATE: 3-03-74

PROJECT NO.: 09 080/056 PAGE 2 OF 2

PREPARED BY: RCBacken

ACTIVITIES:
Demforth has two men on site (Ron Reagon & Mike Adams) checking pumps that are on acts.
pumps that me on aite.
The state of the s
I well today plus danged some drawn of soil.
over to make a pad for the VES tracken to be placed on the trailer
is acheduled to arrive on Monday. Non said he would send then over
either this afternoon or tomorrow at the lastest. Mile + I laid out the
ready to make the Discher was
to the borns site I'm and the in
Howard called at who a 'co to follow, Gramand or VI to call me
Turscaroura Rol and I rok not as
Durforth (Kon) thinks there is a problem with some of the pumps that
the have arrived on site they may have afigured the wrong pumps that it is hard to match them up. Ron is going to pall and it to
it is hard to match them up have appeal the wang purpos but



DAILY	FIELD	ACTIVITY	IOG

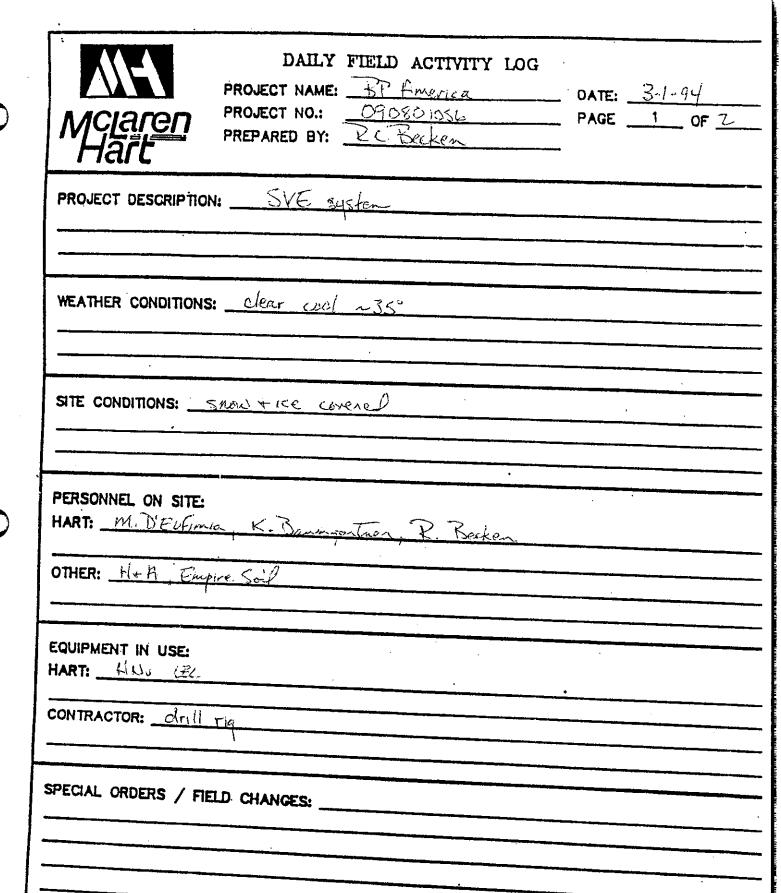
PROJECT NAME: BP America DATE: 3-02-94 PROJECT NO.: 09 080/056 PAGE 1 OF 2-PREPARED BY: RC Briken

PROJECT DESCRIPTION: SVE System WEATHER CONDITIONS: SURRY, Clear + cost SITE CONDITIONS: SNOW FICE COVERED PERSONNEL ON SITE: HART: K. Brumgartner, M. D'Evfimia, R. Becker
OTHER: 14A, Engro Soil, Nagara Bonatries EQUIPMENT IN USE: HART: HNU LEC. CONTRACTOR: _ dell rig SPECIAL ORDERS / FIELD CHANGES: _



PROJECT NAME:	BP America	DATE:S-02-94
PROJECT NO .:		
PREPARED BY:	Re-Rocker	PAGE OF

ACTIVITIES:
The filters building plus me VEW 17 which is to the fire sont of
The filters building plus me VEW 17 which is in the north east over
Wragana Country on site marking off the apprimenter of the areas to
Today the sent of the de the
I talked to been bealings the
he said that fore Molter was working on it so I trish to talk to her
but just got her phose mail: I lest a so I tried to talk to low
durch and called again still just got the store is a sail often
mouses to cape 1430 Miles D. tred a call for 2 a last onother
but just got her phose roil, I left a message and writed until after hunch and called again still just got the ghove mail, I left another message. At again 1430 Miles D. tread a call for and got three to her she had received the wrong information she was looking for a gest due invoice from Cadao to pay where she got that who by a for a gest due.
moved from (2010 to
to her the groller who put us back to Gary who we again left a
message for this time he called back within 15 nin and said he would
get on it notif away.
al the field office to thomas the bentomet that DEC, MIH pitteber
laying and covering BP was informal that we will proceedings for
laying and covering BP was informal that we were brook to the organs
plan of using soil cover instead of estare. Bot would be coming up
Darter of the DEC. Manage was still a consent of Marty Met with Bot Po 1992
Met with Bot Parke 120
Met with Bob Portlill regarding the plumbing in the treatment building what we need done sto , he will sopet the naturals then let re-
know when he can start well soft the materials then let me





PROJECT NAME: BP America DATE: 3-1-94

PROJECT NO.: 090801056 PAGE 2 OF 2

PREPARED BY: RC Becken

Empire Soil on site Anilled 5 wells today in the road way last of the filters building also dumped dum of soil (drief cutting). Mike of finished suiting of the wells of campy of them in the month area including the month cost area. Also moved 5 pumps from the Matuallies dock area to the treatment building it as heaten were moved also. I called Nagara Rounting to schedule them to survey the areas to be capped by the bentomet al soil. I final get in touch with Brian Horison in requards to the concrete
Mike the finished setting of the wells of company then in the mosth area including the worth cost area. Also moved 5 pumps from the Metuallies dock area to the treatment building it sai heaten I called Diagaia Bountures to achedule them to survey the areas to be capped by the bentoment of soil.
Mike the finished setting of the wells of campy then in the mosth area including the worth cost area. Also moved 5 pumps from the Matuallian dock area to the treatment building it sai heaten I called Dugaia Rountures to achedule them to survey the areas to be capped by the bentoment al soil.
were moved also. I called Nagara Rountures to supedule them to survey the areas to be capped by the person to be suped to the super to the survey the areas to be capped by the bentomet al sort.
were moved also. I called Wagain Bountures to achedule them to survey the areas to be capped by the bentoment al nort.
dealled Wagaia Rountures to achedule them to survey the areas to be a final bentoment al and.
capped by the bentament al and.
of the all the terms of the ter
the sent get in touch with Ruan Hanile in requests to the country
said they couldn't take it because 44 on The
said they couldn't take it becomes 4.4 pps TEE was great in the
isample analysis of talled to Toxy Downld at cum model city and
he augusted sether a TCR total constituent alphia analysis or have
Row Spears state in written as other Fool compounds have been used
on site (this I'm pure he won't do). I then called Margret Bown
of Hith to inform here and to get her to tall to how about the letter.



PROJECT NAME: BP America DATE: 2-28-94 PREPARED BY: RC Becker PAGE 1 OF 2 Mç<u>laren</u> PROJECT DESCRIPTION: _____ SVE Sustan WEATHER CONDITIONS: clear cold SITE CONDITIONS: _ Snow + we covered PERSONNEL ON SITE: HART: M. D'Ebfinia, K. Baumgartner, R. Becker OTHER: NA DEC EQUIPMENT IN USE: HART: NNS CONTRACTOR: _AEM& SPECIAL ORDERS / FIELD CHANGES: _____



		~			
PROJECT NAME:	BP America	n	ATE.	2-28-74	
PROJECT NO .:	09 080/056				_
PREPARED BY:			AUE.	OF <u>Z</u>	_

ACTIVITIES:
No doile is the
- No drillers on aite today, No Farqueon Electric.
the Bentimat board that is to line up a now to unload
the Bentsmat board that is to arrive tomorrow, also called to
to do while want is for the On I of the Course southing
Ter Brea Radius of the local of Bertinat to arrive.
Per Brian Radius I went out and bought a small generation for the
site while at was doing this keven and Mick land out wells in
The diviewer and description of pool devan you.
last weeks work and up coming work for this week. Keven from the Dick
I bet to the final great plan he is expecting it I do
ley bestimat which should be on the 7th is expecting it before we
Mik + Keven worked on cutting off wells in the north area this oftenoon while of fixed the flow meter in 2000
ofternoon while I find the flow meter in PWI and shocked the
After mater in 7W2 which was clean.
- Relieved a call of
credit not being approved as of yet at Ceder then at app 1630 of
received another call from Valence saying that I am all appr 1630 of
my price of 38/50 ft. which I'm portion Will to The shipping in
received another call from Valery saying that I included shinging in said to me was included Holery says no its not test him ? Para I've had
said to me was included Holory says so its not that friend would be the best sate available apper 2.54/4 ft
7 7

MA
Mclaren Hart

DAILY	FIELD	ACTIVITY	IΩG
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	PROJECT NAME:	BP America	DATE:	2-25-94
Mclaren Hart	PROJECT NO.: PREPARED BY:	070801056	PAGE _	1 OF 2
PROJECT DESCRIPTION	N: SVE syc	tan_		
WEATHER CONDITIONS	· <u>Leur</u> , sur	ny, cold		
SITE CONDITIONS:	ice and snow	ionered		
PERSONNEL ON SITE: HART: M. D'EUG OTHER: HAR EM	_ •	gortner, R. Briken ison Electric		
EQUIPMENT IN USE: HART: AND LEL				
CONTRACTOR: _dall o	70			
PECIAL ORDERS / FIE				
		·		
		·		



PROJECT NAME: BP America DATE: 2-25-74

PROJECT NO.: 09.0801056 PAGE 2 OF 2

PREPARED BY: RC Recken

ACTIVITIES:
Engine Soil on site with one crew drilling in the roadway today plus probable up and dumped dum. They competed three wells designed the testing the transfer of the souls and the second dumped
eath sast of the Dies with one crew drilling in the roading
today plus picked up and dimped diens. They competed three wells
Lerguson Electric bullows
today be was boxing a lit it it
Fw-1; that grober was with the 10m on to
FW1, that probed was with the slave me had a problem with
FW-1; that grober was with the flow meter not working. We chicked the natural the working was from the natural the cover from
the nelle and found it to be stoped with my le attended from
the notes of found it to be felled with small stone chips at the series of several other plastic parts were broken I cleaned the stone chips out all tried the notes were broken. I cleaned
the store chips out all tried the meter segain but it wouldn't
secretar any flow as I removed the interior parts of in tweeter and
ail the cover back on Dave then alacked the find flow meter
$\mathcal{M} \cdot \mathcal{L}$
of water for the state of the s
and the whois we are a die to the stand another the
note, I asked bot wheir we couldn't hook up the germanent flow release
to be been we have,



DAILY	FIELD	ACTIVITY	TAG
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PROJECT NAME: BP America DATE: 2-24-94 PROJECT NO.: 09 080 1056

PREPARED BY: RC Becken

PAGE _ 1 OF _ Z

PROJECT	DESCRIPTION:SV	system			
WEATHER	CONDITIONS: windy	, cold, snow			
SITE CON	IDITIONS: SUM YICE O	overed			
HART:	EL ON SITE: L. Baumgartner, M. Hoh, Empire Soils,	D'Eufimia, Ferguson E	R. Becken, T	3. Radis	
	HNU LEL			•	
	OR: <u>drill rig</u>				
FEUAL OF	RDERS / FIELD CHANGES	3:	·		



PROJECT NAME	BP America.	DATE: 9 o/ 0/
PROJECT NO .:	09 080/056	DATE: 2-24-94
PREPARED BY:	PC Bocken	_ PAGE OF

ACTIVITIES: one crew drille in the road

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP American PROJECT NO.: 090801056 PREPARED BY: RC Backen.	DATE: _2_23_qv PAGE1_ OF _Z_
PROJECT DESCRIPTION	: SVE system	
WEATHER CONDITIONS:	cool	
SITE CONDITIONS: 5	sil starting to freeze again	
	e, Fergusen Electric Empire Soil	
EQUIPMENT IN USE:		
	g, excavator, backhae	
SPECIAL ORDERS / FIEL	D CHANGES:	

:



PROJECT NAME: BP America DATE: 2-22-94

PROJECT NO.: 09 080/056 PREPARED BY: Recken

PAGE _ 2 OF 2

ACTIVITIES: Lerguson Ediction has one man on site working inside
the treatment lighting they also brought their site treate in today.
Cerrore by the 100 the
approximate the said from the well have
existe coll to to
states hard I'm and I have been east of the
the top to cut down on any settler. The rost of the trench to
field with soil that had been estaurated from the Trench was
and also the analytical for the PPE from RES. I and
and also the analytical for the PPE from RES. I made copies and
gave them to Margret Born who was or cité for Hit and also fasted a copy of the concrete a laptical to waste Management.
) and the contract of the cont



Mclaren Hart	PROJECT NAME: PROJECT NO.:	BP America Og 5801056 RC Broken	DATE: 2-23-94	
PROJECT DESCRIPTIO	IN: SVE syst			
WEATHER CONDITIONS	s: <u>cold</u> , snow	s, sleet		
SITE CONDITIONS:	frozen, snow	covered		
PERSONNEL ON SITE: HART: K. Boung OTHER: N-A Cerr	arther M. D'E	Elfina, P., Becken,	R Radus	
EQUIPMENT IN USE:		and, Therefore Cileria		
CONTRACTOR:back	hoe, drill rig			
SPECIAL ORDERS / FIE	ELD CHANGES:			·



PROJECT NAME: BP America DATE: 2-23-94

PROJECT NO.: 090801056

PAGE _ 2 OF Z

PREPARED BY: RC Becken

ACTIVITIES: Lengueson Electric on site with one man working in the
treatment building to I a the
treatment building. Don Free In - Hal Wright of RL Stone were on att
for approve him walking through the treatment building.
holes ground the colors
of the last for the
and love of PPF + 10 (2) was they clean up of all the poli
and and a pole of there are the
- Drien and of had a next with the form that allulis
work in the late to discon all
The Dents mat line
- truping Carlo de Do D de La
Empire Soils dulled in the roadway each of the filter building above grand well hook up but it is the on the drawing as an
above grand well had I to
and matalled as I led
I would to do to the part bull well,
clean well-of that is full but I me to the one
clean sollege that is full but I a couldn't get a Buffoli Tuel



	TIETTO MCTIALLA				
PROJECT NAME:	BP America	. 04	ATF.	2-21-9	4
PROJECT NO.:	090801056	p,	AGE	1	DE 2
PREPARED BY:	Rc Becken	 , ,		······································	JF <u>~</u>

PROJECT DESCRIPTION:SVE system_ water line = gas the installation
water line - gas the installation
WEATHER CONDITIONS:cool
SITE CONDITIONS: wet + muddy
PERSONNEL ON SITE: HART: K. Baumpartner, R. Becker, M. D'Evfinia
OTHER: WHA COCCO
OTHER: W+A, cerrone, Niagara Piping, Ferguson Electric
FOURDY COLUMN 1
EQUIPMENT IN USE:
CONTRACTOR: excavator backhoe
SPECIAL ORDERS / FIELD CHANGES:



	0-	
PROJECT NAME	BP America	7) 4 mm
PROJECT NO	090801056	DATE: 2-21-94
	010801856	PAGE _ Z OF Z
PREPARED BY:	RC Becken	
	v- becken	

ACTIVITIES: Arme on oite at 0750 Kever, myself and Additional work today- pur



PROJECT NAME: BP America DATE: 2-18-94 PROJECT NO.: 090801056 PAGE 1 OF 2

PREPARED BY: R.C. Becken

PROJECT DESCRIPTION: SYE	System
water	- gas line installation
WEATHER CONDITIONS	
WEATHER CONDITIONS:	
SITE CONDITIONS: Syon +1CE	metting, water everywhere.
- muddy	
PERSONNEL ON SITE:	
HART: M.D'ESFIMICA, K. Ba	rumgartner R. Rocks
	1 - Color
OTHER: HAA, Cerrone, Ning	an Riping
EQUIPMENT IN USE:	
HART: HNU LEL .	
	•
CONTRACTOR: excavator, back	khoe pumps
PECIAL ORDERS / FIELD CHANGES	



PROJECT NAME: BP America

PREPARED BY: RC Becken

DATE: 2-18-94

PAGE 2 OF 2

ACTIVITIES: FAMILY STIPLE
ACTIVITIES: Expus Soil not on site this morning.
Cerrone started day by pumping water out of the trench Niagare Riping where it meets the treath the enlarge the trench
segue taying gas line. At 1030 Cerrore was told to a la the tagare liping
where it meets the treatment building Ding Ding Counch
to other up the oraling TI
1200 when he casin D ()
lin on site (1)0 alm & 1 a li
do the work but the line of the Magara Papar
day year 1230 it in a to
the trench as fast as we could be
Thanks and college it is to
treatment building had a
to within I feet in the
was the water line and continue that sete he
realment he of the
led of the late. I are to
Plugged and Tage) to
Blugged and taped to skeep forces under of the water line were We had a meeting with the DEC at 1530 present was Dave Kordland of H+A, Kevin from the DEC and surged. Kevin as
H+A Kevin how to DEC at 1530 present was Dave Marile of
H+A, Kevin from the DEC and unself. Kevin again said he would like
Man Annaha and Man
Don langohan they would have it by 3/11/94. One electric entering submersible pump was left in the treath begins the treath sepide the treath shoulding to continued pump water from the treath one if we had
treate of his is
theretain to continued pump water from the trans
treate at building to continued pump water from the trench over the weekend.
68 los entrie aus lague pine et l'
GWE.
GWE. The Fraking connections + backfilling portly of

Mclaren Hart

	PROJECT NAME	RD Gma	OG ·	,
A ACIDION	1000001 110:	01000105C	DATE: 2-/7-9 PAGE 1 0	4
M <u>claren</u> Hart	PREPARED BY:	Rc Bocken	PAGE 0	F <u>2</u>
PROJECT DESCRIPTIO	N: SVE sy	sta		
WEATHER CONDITIONS	Surry C	ool		
SITE CONDITIONS:	snow alice	covered but me	? ting	
PERSONNEL ON SITE: HART: K. Bournge. OTHER: HAR, Empe	then M. D'E	ufinin R. Becks WS Jalason, Apr	lle Steel	
EQUIPMENT IN USE:	<u></u>	· ·		
CONTRACTOR: elean	to, back hor,	I how ram, pump		



PROJECT NAME: BP American DATE: 0/17/94

PROJECT NO.: 09 050,056 PAGE 2 OF 2

PREPARED BY: Rc Recken

ACTIVITIES: Engire Soil was on inte today with me new drille in the countried at the end of the day they had completed if well. the hand sails on the double doors, I asked mike To adjust the one laborer Sinish the trans the owe in the clean gove. A decar gre as the old one had considerable damage from

MA	
Mclarei Härt	7

Mclaren Hart	PROJECT NO.:	P America 090801056 R C Becken	DATE:	2-16-94 1 of 2
PROJECT DESCRIPTI	ON: SVE st	stan		
WEATHER CONDITION	1s: _suny, cool			
SITE CONDITIONS:	Snow covered ic.	e covered but me	lting	
PERSONNEL ON SITE HART: R. Becken OTHER: N+A Ce	B. Radus M.P	Placets K. Baumgant	er, M. D'Eufin	16-
EQUIPMENT IN USE:	<u></u>		•	
CONTRACTOR: <u>2xta</u>	vator, backhoe	, hee ram		
		·		
	•			



PROJECT NAME:	BY America	DATE:	2-16-94
PROJECT NO .:	09 0801056	•	
PREPARED BY:	Re Becken	FAGE .	2 OF 2

ACTIVITIES: Empire Soil or site chilling in courtyard and is east of the filters building in driveways The court yard work is the south west comes six wells. Cerrone on site for waterline & pay line work was done for showing of the connection we sloped the east west walls. placed perpendicular breach or in the BZ. Tranching continued using in the well seeled indicated a swollin becurse groundwater well lin

MCIAren PR	DAILY FIELD ACTIVITY L. ROJECT NAME: SP America ROJECT NO.: 0801056	PAGE 1 05 7
PROJECT DESCRIPTION:	REPARED BY: K.C. Decken	
WEATHER CONDITIONS:	clear, cool 10-35°	
SITE CONDITIONS: - SAO	w, ree but thanking	
PERSONNEL ON SITE:	x, M. D'Evfinia, R. Becker	
·	Soil, Cerrone, Niagara Piping	
EQUIPMENT IN USE:		•
CONTRACTOR: hoeram,	CHANGES:	
	ATANGES:	



PROJECT NAME:	BPAMerica	D 4 ===	2
PROJECT NO .:	0900000		2-15-94
PREPARED RY		PAGE	OF <u>2</u>

ACTIVITIES:
drive up east of the silters build no crew drillers in the
today was 6 me work will total wells alulad
Cerrone was on it hospital today.
the trench where the gas line had to be repaired. Continued
trencher towards the 20th to be repaired. Continued
that and the waterline from ?- I which news to the
filters building had no problems fully these lines, water the water was to be made
lines is appro 6.5 ft doep where the court these lines, water
of the trench will have to be sheet out D.
of the brench will have to be about a D
The close to the executation for sloping. At the end of the day the
Trench between the gas connection and tree water connection was
complete and the hardouble trench was appose to beyond the waterline.
The broken gas his was repaired by 1130 and the gas was turned
on after authorization by Sua Boyle. The connection was sheaked for
bake by mp using the LEL after the gas was turned on.
all preferrated with whe covered with sole
Fishmal 1 11 11 11 1
Estimated 4 additional hours + backhor / hor from for the day because of deep frost.
theef frosting between the

Mclaren Hart	PROJECT NAME: BP American PROJECT NO.: 09 080 1054 PREPARED BY: RC Backen	. OATE: PAGE	2-14-99 1 OF 2
PROJECT DESCRIPTION	ON: SVE system		
WEATHER CONDITION	S: cold, clear +sunny		
SITE CONDITIONS:	frozen, snow covered		
	ma, R. Becken, K. Boungartner pere Soil, Cerone		
EQUIPMENT IN USE: HART: _ ドレン, しき	Ĺ		
CONTRACTOR: BYCA	vator, hoe row, drill rig		
SPECIAL ORDERS / FI	FLD CHANGES:		



PROJECT NAME: BP America	DATE: a w/ c/
PROJECT NO.: 09 080 1000	PAGE 2-14-94
PREPARED BY: RC Becken	OF

ACTIVITIES. (7)
to a terrore of trupine Soil on site Cerrone
which for gos and wonter line, Empire Soil der
ACTIVITIES: Verrone a l'Empire Soil on site Cerrone diaging total for gas and wonter line, Empire Soil dempire drumo and
Empere Soil had me
Energie Soil had one crew on site they sumped dirty and clean soils today, the stan soils went into WRR 139, the
ditty soils were de l'it went it WRR 139, the
were the gaven the existy cell, alor dunged
these were duy as I die 12 to the Margret Boxes of Hot A
dulled are well to a the execting cell also. Engine Soil
these were dunged directly into the exection cell also. Engine Soil
Carrie at the time
Corrone started trenching for the gas line at the south part
come of the blue meeter of the gas line at the south east appr 1/2 fast deep when he hit the gas his punching it
appr 1/2 fact deep when he hat the gas live punchusing it in
which was and to stook the fland to the sparation
which was and to stop the flow of gase Bot Parkhill was called to the the spainting the the new line from there he short was needed to repair the line and
- use the new line of the
and any the sale appropriate the factor
a spoke to bob land l'or to
Trockies de la faction de la f
The primary party of the state
it would be A was fulled towards which Bob Parklill and I I
N+ A and 30 k. included report was written and facel to 5
It would be. An incident report was written and forced to True Boyle of N+ A and Brian Readus in Pittsburgh. The decision was made to enspired translate because the the fragen soil was so deep but we Tried die
in war of the figure soil was no deep by the Till
award different areas and found the last a treat diagram
no opposed to 21/2 feet deep where we had the
continue trenching



PROJECT NAME: BP America DATE: 3-1/-94

PROJECT NO.: 09-080/056 PAGE 1 OF 2

PREPARED BY: PERALED BY: PROJECT DESCRIPTION: SVE System WEATHER CONDITIONS: ______ cold, clear SITE CONDITIONS: Ship wice covered PERSONNEL ON SITE: HART: K. Bramgontien, M. D'Eufinia R. Reiken OTHER: N+A Enepere Soula EQUIPMENT IN USE: HART: HOUS LEL CONTRACTOR: Dall Rig Flot water truck SPECIAL ORDERS / FIELD CHANGES:

11-11	
Mc <u>laren</u> Hart)

	THIN VOILILL TOG	•
PROJECT NAME:	BP America	DATE: 2-11-94
PROJECT NO .:	07.0801056	PAGE 2 OF 2
ספבסאסבט מאי	RC Rocken	

ACTIVITIES:	
Checked PW-2 this morning because Dove Mordtent of H+A thought	
it wasn't guinging but when we checked it was working fine.	
Don Yor of fox fence care or site to look at the proposed sonce	
area he will get me a price by next week some time, his installers	, "
It wasn't guinging but when we checked it was working fine. Don Yor of tox Tience came on site to look at the proposed fonce area he will get me a price by next week some time, his installers are 40 hour trained.	
Empire has one crew on aite they are drilling in the south cost are along the road one at the entrance to the court yard. By the end of the day they had 4 wells done.	<u>a</u>
along the road and at the entrance to the court yard. By the end of	
the day they had 4 wello done.	
I spoke to Norm at Cerrones about water are + gas line work to which	<u> </u>
well be started on Morday I complained about the fact of still has	ht
recieve prices for the solimated naturals needed, his connect was	that
be thought him Museum Praire was to be a sub- auto- to to Carone be	· *
I said that would be fine but I still would like to have a mater	العد
e coot.	
We received 4 pumps from Aurora Pump yesterday. We faxed prekindligs to Chinters Ratherford in Pittoburg.	1
colleges to Chinten totherford in Pettoburge.	!
	



	PROJECT NAME:	BP America	_ DATE:	2-10	-94	
1.4010505		09 0801056				_
Mclaren Hart		Re Becke	- 			_
Hart	•					
					——————————————————————————————————————	
PROJECT DESCRIPTION	1: SUE sops	ten	== 			_
				·		
						_
WEATHER CONDITIONS	Sunny C	old				
						_
						
SITE CONDITIONS:	snow covered	,				_
, ,	- Constitution				·	
			<u></u>		-	
		•				
DEBCONNEL ON CITE			·			
PERSONNEL ON SITE:	V R	- ORI				
HANTE THE DEOF	imia, r. Wan	matren, R. Becken				
OTIED. H. N. F				 		
UIHER: NYA E	mane Cerron	٩	·			
					· · · · · · · · · · · · · · · · · · ·	
						
EQUIPMENT IN USE:		,	·			
HART: KNU L	-EC	·	•			
COMPLETE	//					
CONTRACTOR:dr./	1 114					
						
SPECIAL ORDERS / F	TELD CHANGES: _					
						—
				<u></u>		
	**************************************				;	
						
				_		
						

Mclaren Hart	PROJECT NAME: PROJECT NO.:	FIELD ACTIVITY LO BP America 090801056 RC Becken	OG DATE: 2	
ACTIVITIES:			100 0 -1 11	0.0
t mpire	nort had one	crew on site du	wed to three	wells
Loday sent	it on anoth	removing stuff for	oul Statura	tenteda.
Dave of 1	1+ fi approved	more wells to	his as morning.	
Took a se	emple of the I	Of AES doesn't t	E, Ethyl Fthe	- Cyclohexanone
and Mathered	Mike Cadahee	of AES doesn't t	hink there will	be any
addition !	change for the	and should have	- heard on	o days.
	ip we found	in the treatment	June 1	
			·	-,
	<u> </u>			
				······································
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l				

PROJECT DESCRIPTION: SVE SYSTE WEATHER CONDITIONS: LOCAL SNOW SITE CONDITIONS: 100 4 SNOW COVERED PERSONNEL ON SITE: HART: M. D'EUGIMIC, K. Baumganting, R. Bucken OTHER: N+A, Governor Enquir Soils EQUIPMENT IN USE: HART: NUU LEL CONTRACTOR: drill rig SPECIAL ORDERS / FIELD CHANGES:	Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: EC Becken	DATE: 2-09-94 PAGE 1 OF 2
SITE CONDITIONS: 1CE + Snow covered PERSONNEL ON SITE: HART: M. D'Eu fimia_, K. Baungartine, R. Becken OTHER: HAR, Empire Soils EQUIPMENT IN USE: HART: KNU LEL CONTRACTOR: drill _ rig	PROJECT DESCRIPTION	ON: SVE system	
SITE CONDITIONS: 1CE + Snow covered PERSONNEL ON SITE: HART: M. D'Eu fimia_, K. Baungartine, R. Becken OTHER: HAR, Empire Soils EQUIPMENT IN USE: HART: KNU LEL CONTRACTOR: drill _ rig			
PERSONNEL ON SITE: HART: M. D'Eufimia, K. Baumgartia, R. Becken OTHER: H+A, Governor Empire Soils EQUIPMENT IN USE: HART: HNU LEL CONTRACTOR: drill rig	WEATHER CONDITION	Is: cold, snow	
HART: M. D'Eufimia, K. Baungartra, R. Becken OTHER: HAR, Governo Empire Soils EQUIPMENT IN USE: HART: MUU LEL CONTRACTOR: drill rig	SITE CONDITIONS: _	1ce + Snow covered	
OTHER: N+A, Empire Soils EQUIPMENT IN USE: HART: NUU LEL CONTRACTOR: drill rig			
CONTRACTOR: drill rig			
	• • • • • • • •		•
SPECIAL ORDERS / FIELD CHANGES:	CONTRACTOR: dri	U ria	
SPECIAL ORDERS / FIELD CHANGES:		1	
	SPECIAL ORDERS /	FIELD CHANGES:	

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Mclaren Hart

PROJECT NAME:	BP America	DATE:	2-09-94
PROJECT NO.:	090801056	PAGE	2 OF 2
PREPARED BY:	Ri Becken		

ACTIVITIES: Enpire Soils on site one new drilling in the court yard drilled 5 wells today we had to take the derich off of the drill rig because of the close proximity to the overlead forcer lines.
drilled 5 wello today we had to take the deruch off of the
drill sig because of the close proximity to the overhead forcer lines.
I talked to & down at Cerrones in requards to his pricing
for the bentonet placement he had priced #2 RCC stone for cover
I told him that woost acceptable we need something that will
I talked to # down at Cerrones in requards to his pricing for the heatomat placement he had priced # 2 ROC stone for over I told him that woosit acceptable we need something that will support poster vegatation, he was going to find cornething and resonant a grice.
restrict a grice.
Randy Retylofs of Hasley called and we talked about his
gricing he said his labor vates are with layard pay included if they didn't need to wear a typek we could take off 200/hr.
if they didn't need to wear a Tyrek we could take off 200/hr.
for the foreman and labor and 250/hr. for operators. I think I can beat him down a little more on equipment too. Rindy
- can vear rum down a with more on equipment too. Khuduy
also said he was going to a seminar in Rochester being put on by
Sento me
I apoke to Mike Scanano of Cwm and got the facts again about the PPE analytical and disposal, then called Mike Cuddaha at AES requarding additional analytical and cost (I told him I thought that I had already sound for this.
vie FFC analyseed and disposed Them called Micke Widdolphie at AES
requarding vacuumas analytical and cost of told him I thought that
I had already spaid for this.
the south of the state out more wells mean the entrance to
Mily Kern and of the flow out more wello mean the entrance to the courtyand and to the east of the filters building these wello were also approved by H+A.
me approved by MYM:
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114
Mclarer Hart

MCIAREN PROJECT DESCRIPTION:	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America 090861056 RCBecker	_ DATE: _ _ PAGE _	1	- OF -	2
WEATHER CONDITIONS:	cold, issue	ly proving				
PERSONNEL ON SITE: HART: K. Banganta		·				
EQUIPMENT IN USE:	mi, Empire S	Soilo				
CONTRACTOR: dogen	drill sig					



PROJECT NAME:	BP America	DATE:	2-08-94
PROJECT NO .:			
PREPARED BY:	RC Broken	,,,,,,	Ur <u></u>

ACTIVITES: Had meeting with Norm + VI of Cerroses and Blo
Parkhill or Rugar Pipla to concerning the water line of gas line Corrose is ready to dig whenever Parkhill gets the noterial.
line Corrow is ready to die who was P 10 00 to
FT+M bid to placement of the Centerent lines and 6" of come they
could start that whenever we are ready.
Met with kardy Ketalall of Hoadan I
The first and a world a sure of the
with Haseley background and approach to the proport than Cornores.
with Heseley background and against to the privat the Comment
the state of the s
messer to have
Personed shop drawings of the electrical sub station from Meson Eng. and delivered them to Ferguson Electrics.
to man and delivered them to Ferguson Electrice
Cerrore removed the poly structure covering the trans
the overhead don for the Delter builder and felled the
Cerrone removed the poly structure covering the trends pring east of the overhead doo for the folters building and felled the remainder of the trends with \$2 stone.
Company when I am I am I am I
area and accomplished 5 wells for the day.

Mclaren Hart	PROJECT NAME: PROJECT NO.:	BP Rimerica 090801056 RC Recken		DATE: _ PAGE _	2-7-94 1 OF
PROJECT DESCRIPTION	DN: <u>5VE &</u>	1 stem.			
MEATHER CONDITION	Is: <u>cold</u> clear				
			·		
) /		 	· · · · · · · · · · · · · · · · · · ·
STE CONDITIONS:	Show covered	ice covered			
	3.00.0				
PERSONNEL ON SITE			2. Becken		
PERSONNEL ON SITE	majantae, M.		C. Becken		
PERSONNEL ON SITE HART: KBam OTHER: H+B, C	majantae, M.		2. Becken		
PERSONNEL ON SITE HART: K Bow	magniture, M.	D'Enfinia,	·		
PERSONNEL ON SITE HART: KBOW OTHER: N+A C EQUIPMENT IN USE: HART: LONE	magantaen, M.	D'Enfinia,		•	
PERSONNEL ON SITE HART: KBOW OTHER: N+A C EQUIPMENT IN USE: HART: LONE	magantaen, M.	D'Enfinia,		•	
PERSONNEL ON SITE HART: KBOW OTHER: H+B, C	erme m.	D'Enfinia,			

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A comment of the second second

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Mclaren Hart

PROJECT NAME:	BP America	DATE:	2-7-94
PROJECT NO .:	09 5801056	PAGE	2 OF 2
PREPARED BY:	RC Becken		

	_
ACTIVITIES: Pensered call from Engine Soils anying that the crew	
would be out after linch to get the right hunging and then start drilling on Tuesday morning.	_
start drilling on Tweedon morning.	
VIT . I (a) as all of at as a lost acount to	_
flowable grout to so he govered, they are now to gove to 6" wheat the	
fine have it get up until tomorrow then sinish the externation	
with consider store. This load of Alavatra service of 1005	
and started youring at 1010, served load arrived at 1055 and gove	rad.
at 1/30.	
I talked to Haraley Trucking about laying the Bentinet and gover	
Them (Kind is the safet a allow and the information that	
the Centernat person gave me on Grada. Also gave V5 the rane;	
he and Norm well be here tonourous to take about it.	
Keven pointed win the treatment building down the lab low and	
3/4 of the MCC noon, should finish up tomorrow.	
Empire craw rever showed up today. Mike and I checked	_
the ice which we will have to stanch though it is solid us.	
consum for water harleing.	<u> </u>
	_

MCIaren Hart	PROJECT NAME: PROJECT NO.:	FIELD ACTIVITY LOG BP America 69.0801056 RC Becken	
PROJECT DESCRIPTIO	N: <u>5VE s</u> x	ystem	
WEATHER CONDITION	s: <u>cold</u> , dea	r, windy	
SITE CONDITIONS:	Sion covered	REY	
PERSONNEL ON SITE		D'Eufinia Ra Bo	icken
OTHER: H+A	Nlagara Pipine	z, Cerrone	
EQUIPMENT IN USE:		·	•
CONTRACTOR:			
SPECIAL ORDERS /	FIELD CHANGES:		

11-1
Mclaren Hart

PROJECT NAME:	BP America	_ DATE: _2-02-94
PROJECT NO .:	09 080 1056	PAGE 2_ OF 2
PREPARED BY:	R C Becken	

ACTIVITIES: Nogana Pierra is prefabine the piper in the filters building pressure testing of the two bottom layers took place this morning between 0815 and 0917 had no harkage. These
building pressure tosting of the two bottom layers took place
this morning between 0815 and 0917 had no Bakage. These
usines were taken outside to the trench and two men started installing
them while the third man worked on prefibing the tity two layer of fige which were pressure tested between 1315 and 1415 again no problems. The first two layers were installed today the second two will be installed toward our.
of fige which were pressure tested between 1315 and 1415 again
no problems. The frist two leagues were installed today the second
two will be intilled tomorrow our.
Cenous was on sete desaning and removing iron from
Cenore was on site desening and removing iron from the site, VS said when asked that when he would pur grout was that it would be next Minday.
that it would be next Menday.
Kevin finished prime walls in the treatment building today. and him, Dave Rostrent and of neviewed utility problems in the
court yourd.
I spoke to CWM this morning about PPE apporal and found out
that there is a sarble than Mike & of Custon and dealth letter
Mot there is a problem there. Mike 5 of Cusin will draft a letter
I spoke to Brian Hanika of Waste Management about concrete disposal
he gave me a quice of 20/ton and again and full TCE analysis
was all they needed. I then call PRDER in Meadwille, to and spoke to
Rich Strawn who said onything the landfill wanted was sufficent
for the otati.
Mile entered drill logs into the computer.

·		
Mclaren Hart	PROJECT NAME: BP Americal PROJECT NO.: 09 080 1056 PREPARED BY: PC Becken	DATE: 2-01-94 PAGE 1 OF 2
PROJECT DESCRIPTION	1: SUE Syptia	
WEATHER CONDITIONS	: rold, overcast	
SITE CONDITIONS:	1ce + snow (were)	
PERSONNEL ON SITE:	Finia, K. Baungartner, R. Ber	k=
	more Niagara Piping Jergusan El	
EQUIPMENT IN USE:		•
CONTRACTOR:		
SPECIAL ORDERS /	FIELD CHANGES:	

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Mclaren Hart

PROJECT NAME:	BP America	DATE:	2-01-94
PROJECT NO .:	090801056	PAGE	2 of 2-
PREPARED BY:	RC Becken		

ACTIVITIES: Long Manz from Ferguson Electric was on gets to
ACTIVITES: Jerry Mong from Ferguson Electric was on site to finish desconnection the NrS timber electricity and shock up the
lest trace for PW2.
Magan Piping working on the remainder of the Tread piping
from the door way to the state upi. They are prepating it in the
felters building and then will place it is the tranch. There was
water in the trench appr 6" so I had to sall Germe and have
then send over a laborer to gump it out.
and the treatment building
The Hr-S boiler is your to be picked up the this afternoon sometime.
It was at 1430.
of called Waste Managements Lakeview Landfell in Eve For as per
Kon Speans ungersteam, to find out if a TCLP analysis is all They
will need but couldn't speak to the years I need to talk to
I'm waiting for him to call me book. There use to be a Mod I
certification resolved to dispose of non how waste in to I don't know
Driel culting sungles are being dumped into the oppor
Drill cutter, Tungles are being dumped into the appr
disposal storage siea (the cell or the clean soil pile) Samples were
taken from the peven super dirty drums and will be head spaced
per Margaet Bonn of Hold if the head space is less than 200 poin we
can dung the dum its the speits cell
Meagan Piping craw forbicated the first two layers of pipe Today
They will presure test these the first they tomore morning.
The state of the s
TCLP.

Mclaren Hart	PROJECT NAME: BP GARRIED PROJECT NO.: OF ORGIOS 4 PREPARED BY: RC Backen	DATE:
PROJECT DESCRIPTION	ON: SVE system	
WEATHER CONDITION	18: cold snowfliveres	
SITE CONDITIONS:	Show + ICE covered	
PERSONNEL ON SIT	E: -gartner, MD'Eufimia, R. Recken	
OTHER: N+K F	erguson Electric	
EQUIPMENT IN USE	·	•
CONTRACTOR: A/E	√ν.2	
	Me	
SPECIAL ORDERS /	FIELD CHANGES:	
		

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114
MCIAren Hart

PROJECT NAME:	BP America	DATE:	-31-74
PROJECT NO .:	090801056	PAGE	2 OF 2
PREPARED BY:	Rc Becken		

ACTIVITIES:
Corrores equipment ei heaters propane cylinders plywood.
coverete reinforment much, and stone were removed from the
filters building. E. I called Ferguson Electric to come out and
disconnect the electricity to the Has trailer and also called to
have the same trailer demobilined. Keven & of removed the
materials stored used the trailer also. BFC pecked up me
empty rollogs box. All the PPE and poly generated over the past
weekend was pulsed up and placed in the grown rollegs.
I called Hentendon for prices of TCLP, and PCB analytical
for the concrete (9155/sergle TCLP 80/sample PCB)
Jerry from Feranson arrived on pits at 1230 to disconnect the
H+S trailer but had a problem because the peat trace's
for PW-2 is powered from the H+S trailer, or he'll be back tomorrow
to finish the site.
Received a show call from Margret Boar of HAR in regards to the
concepte being desponed of at the country landfill, that is not
acceptable to Carporumdum they would like me to send it to
Takween Londfill in Eric Pa assuring it gasses TCLP.
<u> </u>

Mclaren Hart	OBO ISST NAME: T	ELD ACTIVITY LOG 3P America 19 080:056 RC Becken	DATE: 1-30-	94 OF <u>2</u>
PROJECT DESCRIPTIO	ON: SVE Syste trenching	in filters building		
WEATHER CONDITION	is: <u>clear sky</u> , so	unny, cold.		
SITE CONDITIONS:	SABOL TICE COVERE	zd		
	Ford, J. Parko, R.D	Delisio, K. Baumgartn		2. Becken
EQUIPMENT IN USE:	errone. Nugara Pi	7914		
HART: 料心。	LEL, Tribas, Mini	elbarrah, hand tools		
SPECIAL ORDERS /	FIELD CHANGES:			
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114	•
MCIarei Hart	?

PROJECT NAME:	BP Americas	DATE:	1-30-94
PROJECT NO .:	090801056	PAGE	2 OF 2
PREPARED BY:	RC Becken		

C. Rotherfords field notes 28/94 \$1.00 Arrive unside

20 - Cut to F.B. - a packhoes digging trench (Kubuta) (Kubita)

2745 Durped 1st load of Soil only 2 load into ex-situ

Cell. While Chairying Shwels on backhoe.

230 - Went ant to ex-situ cell to put socks on to well

Soveen (Sch. 90 "4")

Surped load of soil. 9:40 Dunped Load of Soil.

10 - Both Breaking up lancrete to end of building. 1030 - Remare Concrete 11.10 - Brak 12- Bull to Mensity 0000 125 - Break-Linch 200 Bucken, -200 Bucker, duc to high readiness -210 Stopped frenching duc to high readiness dumped excavated soil into Ex-situated 2:30 pppade to jevel l. 2.30 y grace 1,00-20 ppm Source, 10-20 ppm BZ

3:45 Pack to excavation

60-90 ppm Source, 10-20 ppm BZ

3:45 Pack of HND got dirty branger Pump + Bag.

3:46 - Took air Sarple with Dragger Pump + Bag.

af main where VEWys branches and top of thench. 3.95 Asked VJ Cerrore to tell Mark Cerrore to put

345 BZ 5 South 15 - pegged aut and leveled
347 Main trench BZ - 3 - peaked of 15.

353 BZ - 2 Main trench with VEW 45 Branch
357 H&A Randwled measurement
BZ C.5 - 1.2 ppm
Soura 5 - 8 ppm
460 BZ 0.5 - 1 pm Main trench
Soura 3 - 5 ppm
469 Soura 3 ppm at last executated spot
415 Soura 3 ppm at last executated act at 15 ppm
415 Soura 5 talk at 3 ppm parked act at 15 ppm
415 Soura 5 talk at 3 ppm parked act at 15 ppm
Annitaria in VEW 45 Branch

1/29/94 7:00pm armir on 5, for 10:30 - out to F.B. with HOU. 10:45 - Maritared with HOU.

Mclaren Hart	PROJECT NAME: BP AMERICA PROJECT NO.: 690801056 PREPARED BY: PC Bloke	_ PAGE1_ OF <u>C</u>
PROJECT DESCRIPTION	ON: SUE System transhing in felters building	
WEATHER CONDITION	NS: Suaw, mild writer day, no wind	
SITE CONDITIONS:	sum + ice evered	
DEDECMINET ON SIT	TE: C. Retherford, R. Delisio, K. Baungartuen	, M. D'Eufenia
PERSONNEL ON SITHART: J. Panko, R. Becken OTHER: N+R,	TE: C. Retherford, R. Delisio, K. Baungantuen Cerrone	, M. D'Eufema
PERSONNEL ON SITHART: J. Parko, R. Becker OTHER: H+R,	TE: C. Retherford, R. Delisio, K. Baungantuen Cerrone	
PERSONNEL ON SITHART: J. Parko, R. Becker OTHER: H+R, EQUIPMENT IN USE HART: HUJ, L	TE: C. Retherford, R. Delisio, K. Baungantner Cerrone	
PERSONNEL ON SITHART: J. Parko, R. Becker OTHER: H+R, EQUIPMENT IN USE HART: HUU, L CONTRACTOR: 2x	Cerrone Cerrone L. Mini Ram, Tri Gas (carrater, backhoes, frontend loader	
PERSONNEL ON SITHART: J. Parko, R. Becker OTHER: H+R, EQUIPMENT IN USE HART: HUU, L CONTRACTOR: 2x	Cerrone L. Mini Ram, Tri Gas	
PERSONNEL ON SITHART: J. Parko, R. Becker OTHER: H+R, EQUIPMENT IN USE HART: HUU, L CONTRACTOR: 2x	Cerrone Cerrone L. Mini Ram, Tri Gas (carrater, backhoes, frontend loader	

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PROJECT NAME:	BP America	DATE:	1-29-94
PROJECT NO.:		PAGE	2 OF 2
PREPARED BY:	R C Becke	•	

ACTIVITIES: Excavating continued until 1130, the right craw deal
duy up to the foundation under the door. The day crew started by we ramon
the foundation and then duy eastword the necessary amount appr. 12'
from the door then made a 90° term southward for a distance of 10'
of the south edge of the powered, this was completed at 1130. & Diagrams
From crew armed at 0650 and at 1200 are making opening good progress.
Mike has been in the building monitoring while Kevin + I have been
working on the excite cell, we've been extending the war lines to the wall
then ellowing the line up and over the wall righter we finished the 4
was lives we had Carrones operator place soil in the south and of the
exitu cell where we had done the piging. We also added another price
of Reaf Industries for a cover as the other piece was now to short,
the double side tape would not stack so we just sand bagged it is place. Corrored laborers built a goly structure over the exterior portion
of the trench and or wy now (1640) the plumbers are in the home otrator
they should be ready to gressive test at about 2200. Cerrones onew mon
cleaning up and the operator moved the snow that how been pushed into
the draining ditch on the contheast side of the site.
Total voc levels reached 10-20 ppm in the breating gove at 0230 this morning
everyone up graded to level (for 1 hour 45 minutes.

Mclaren Hart	PROJECT NAME: BP AMERICA PROJECT NO.: CON 1056 PREPARED BY: RC Cocke	OATE: 1-28-94 PAGE 1 OF	. 2
	ON: SVE System transhing in felter le	A 2 /	
	thereby in felling be		
WEATHER CONDITION	VS: de rain, windy		
SITE CONDITIONS:	isly, suns covered		
		•	
PERSONNEL ON SITE	E: gartier, M. D'Engemin, C. Beck	en, R. Delisio, J. Parko, C. Co	tlech
PERSONNEL ON SITE HART: K. Bacon OTHER: NAA, C	gartren, Me D'Engemia, R. Beck	en, R. Delisio, J. Parko, C. Ro	therb
HART: K. Bacon	errone.	en, R. Delisio, J. Parko, C. Ro	ther h
HART: K. Bacon	errone.		tkerh
EQUIPMENT IN USE	errone.	•	theris
EQUIPMENT IN USE	cartrer M. D'Enferming E. Breck	•	the h
HART: K. Bacom OTHER: NAA C EQUIPMENT IN USE: HART: HAD C CONTRACTOR: Foo	cartrer M. D'Enferming E. Breck	Loss.	the sh
HART: K. Bacom OTHER: HAA C EQUIPMENT IN USE: HART: HAD C CONTRACTOR: Foo	contrar Me D'Enferming R. Bruk	Loss.	the h
HART: K. Bacom OTHER: NAA C EQUIPMENT IN USE: HART: HAD C CONTRACTOR: Foo	contrar Me D'Enferming R. Bruk	Loss.	theri
EQUIPMENT IN USE:	contrar Me D'Enferming R. Bruk	Loss.	there

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PROJECT NAME:	BP America	DATE:	1-28-94
PROJECT NO .:	09 0801056	PAGE	OF
PREPARED BY:	Pc Bake~		

ACTIVITIES:
Mike, Kevin + I stocked emptying out the sofotog treater placing this
materials in the office trailer and other eguip a supplies in the treatment
building. Keving also did some painting in the treatment buildings
Hed Corona more some seed in the exists coll for us take other day when we
demost to collect we couldn't move one piece , will set in the next vecuum
line in the exects cell and tried to deal with some of the water on
Also done was the dimpine of appr. 150 gallens of water into
The DATIO which was congreted while cutting the congrete tier last night.
We started graphing for transfer at 1430 button up equipment and
we started graparine for transfer at 1430 mater up equipment and uncounting of several hundred gallons of water laying where we are going
to trench toright. We started how ramping the congrete at 1670 and
removal of concrete at 1730, we proke up approve half of the concrete before
comoving it. The concrete pieces were placed into WRB 171-25 for storage.
Soil execution started at appr. 1900 with the first load being damped at
1945 all roils for the entire execuation were above the clean cut of
and considered dirty and placed in the expite the cell.
•
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Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: PC Becken	DATE: 1-27-94 PAGE 1 OF 7
PROJECT DESCRIPTIO	N: SVE system filters building trenching	
WEATHER CONDITION	s: cool no snow, sleet in the s	evening
SITE CONDITIONS:	icey, water logged	
PERSONNEL ON SITE HART: K. Raum	gantur R. Delisão, R. Bectan, h	1. D'Eufania
OTHER: H+ A	Cerrone	
EQUIPMENT IN USE:	Tri Gas, Mini Ram, shop vac	•
CONTRACTOR:	crete_sms	
SPECIAL ORDERS /	FIELD CHANGES:	

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	PROJECT NAME:	BP America	DATE:	1-27-94
		090881056	PAGE	<u> て</u> 0F <u> 2</u>
MCIATER	PREPARED BY:	R (Becken	,	

Harc
ACTIVITES: Mike + I ste aniver on site at apper. 1030, K. Baungertran al C. Delisio arrived med afternoon from Pattsburgh. Proposed for sow cutting after \$1530. Cerrones crow arrived at 1520 appr. at which time they get up the exhaust tubing and water/mes. Started concrete cutting at 1630 only minor problems with Co, had to shel down briefly several times I that we have a hole in the flex Tubing somewhere mean the sow. All concrete author completed and clean up done by 2130 left site by 2145.

•		
A ACIO COD PR	DAILY FIELD ACTIVITY LOG OJECT NAME: BP America. OJECT NO.: 090801056 EPARED BY: RC Backs	DATE:
PROJECT DESCRIPTION: _	SVE system	
WEATHER CONDITIONS:	Snow & windy	
SITE CONDITIONS:	ez, snow coveral	
PERSONNEL ON SITE: HART:	nier R. Beckin	
OTHER: K+R		·
EQUIPMENT IN USE:		•
CONTRACTOR: Lone		

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SPECIAL ORDERS / FIELD CHANGES: _



PROJECT NAME:	BP America	DATE:	1-26-94	
PROJECT NO.:	09 030 1056	PAGE	2_ OF 2_	
DOEDADED BY	Pr Rola			

i iai c
ACTIVITIES:
Had BFC on nite today to dump 2 wellaffs in graparation
for this weekends trenching dumphoras well 229-25 which was
containing ditty soil it was dumped into the extitute all and WRB
171-25 was contained clean soil it was dumped on poly east of the
againty call in the court yard. Mike took Dragear Tube readings while
we were dumping WEB 229-25 Oppm Vinge Chloride 3, ppm TCE
14 ppm Total whitees under the expeter cell sever. Remarked me
trench Corrow thought would be some to do from a different outile.
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i

Mclaren Hart	PROJECT NAME: BP America. PROJECT NO.: 09 080 1056 PREPARED BY: RC Backer	PAGE 1 OF 3
ROJECT DESCRIPTION	Ni <u>SVE Spilem</u>	
VEATHER CONDITIONS	s: cold windy	
SITE CONDITIONS:	Show, ice covered	
ERSONNEL ON SITE	: Femia, Rick Becken	
THER: H+A		
EQUIPMENT IN USE:		•
	re	
	FIELD CHANGES:	
PECIAL ORDERS /		
PECIAL ORDERS /		

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M <u>claren</u> Hart
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ACIARED	PROJECT NAME: PROJECT NO.:	090801056	DATE: ,	1-25-94 2 OF 2
Mc <u>laren</u> Hart	PREPARED BY:	K becken		
TIMITES:	1 0 0			
Mile + 1	hund out the	commender of t	he trenches u	which will done
was straighten	ing of the No	I due on y	ude calling	4
8 don certifi	cate of train	ing that some of	1 our subs se	adod.
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EATHER CONDITIONS:	Aciaren Hart	PROJECT NAME: BP America PROJECT NO.: 09 080/056 PREPARED BY: RC Becken	PAGE	1-24·	-94 , OF <u>Z</u>
EATHER CONDITIONS:overcast _ cool , windy _ sleet ITE CONDITIONS:icey _ snow covered PERSONNEL ON SITE:iART:m. D'E vienna _ R. Becker OTHER:H+A EQUIPMENT IN USE:	1 100 0	ON: SVE System			
THE CONDITIONS: ICEY, SAM COVERED DERSONNEL ON SITE: HART: M. D'E UFEMA, R. Becker OTHER: H+A EQUIPMENT IN USE: HART: Shop ver CONTRACTOR: None					
ERSONNEL ON SITE: HART: M. D'EUfema , R. Becker DIHER: H+A EQUIPMENT IN USE: HART: Shop var. CONTRACTOR: None	VEATHER CONDITION	VS: overcast, cool, windy, sleet			
ERSONNEL ON SITE: HART: M. D'EUfema , R. Becker DIHER: H+A EQUIPMENT IN USE: HART: Shop var. CONTRACTOR: None					
ERSONNEL ON SITE: HART: M. D'EUfema , R. Becker DIHER: H+A EQUIPMENT IN USE: HART: Shop var. CONTRACTOR: None	SITE CONDITIONS:	icey, snow covered			
THER: M. D'E UFEMEA , R. ISECKET OTHER: H+A EQUIPMENT IN USE: HART:					
EQUIPMENT IN USE: HART: shop voc. CONTRACTOR:	PERSONNEL ON SIT	TE: Ofema R. Becker			
CONTRACTOR: None	OTHER: H+A				
CONTRACTOR: None					
CONTRACTOR: Nowe					
	PRINTER STATES				
SPECIAL ORDERS / FIELD CHANGES:					
SPECIAL ORDERS / FIELD CHANGES:		one.			
	**************************************	rone			
	CONTRACTOR:N				

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PROJECT NAME:	BP America	DATE:	1-24-94
PROJECT NO.:		PAGE	2 OF 2
DECRACED BY	R C Rocken		

mai L
ACTIVITIES: Mike + myself arrived on cite at 0800, cought up on our paperwork, cleaned a congel of areas in the filters building which cereary amised yesterday and descionantal his leaters and which cereary amised yesterday and processed his leaters and proposed uplants to arm your get of Methodews way. Personal large were input into the competer, the tracks was element up and a new trup was get or one of the solly storing clean early and a spring with Pick Paper from the Maging Creating Refuse Disposed of concerts floring than the filters further, he will get back to one regarding and the freehold but he gave a pricing of 36.35 from less than 80 toos per month. I "31,38/6" nose than 80 tons/month.

Mclaren Hart	DAILY FIELD ACTIVITY I PROJECT NAME: BP America PROJECT NO.: 09080/056 PREPARED BY: RC Becken	DATE: 1-23-94
PROJECT DESCRIPTIO		
WEATHER CONDITION	S: warming up 36° sleet	
SITE CONDITIONS:	Snow covered	
PERSONNEL ON SITE HART: J. Panko	C. Retherford, B. Radis, K. Baumga	ther, M. D'Eufenia, R. Becken
OTHER: H+A, Ce	rrone	
EQUIPMENT IN USE:	HNU Tri-Gax EXTOX	·
CONTRACTOR: <u>+60</u> ~	tend looder, excavator, backhoe, ho	e ran
SPECIAL ORDERS /	FIELD CHANGES:	

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Mc <u>laren</u> Hart

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Mc <u>laren</u> Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: RC Becken	DATE: 1-23-94 PAGE OF
Seven loads of setting up this west end of to trench probably concrete best in time to proper to setup. Jenust I took cylinda	grout were poured between 0615 and f. At 1030 we started pouring concrete trench and proceeding eastward to see felt it was more important to see serily set before Monday Am (the general set before monday and the general set the general set before monday and the general set the general	test the piping, we reweekends work. I 0930, growt was the starting of the starting of the seast end of the surface we proved the out doesn't need air st 3 hours cleaning.

the side of the second second

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 09 080/056 PREPARED BY: RC Bocks—	DATE:
PROJECT DESCRIPTIO	ON: SUE System filters britishing trenching	
WEATHER CONDITION	Is: suny, windy, cold 20°	
SITE CONDITIONS:	ENIN covered	
	C- Retherford, Bo Radus, K. Bannyontren	, M. D'Eufing, R. Beck
EQUIPMENT IN USE:	Mini Ram, Tri Gas ExTox	•
CONTRACTOR:	cavata, backhoe, her ran, dump truck	<u>k</u>
SPECIAL ORDERS /	FIELD CHANGES:	

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PROJECT NAME:	BP America	DATE: 1-22-94
PROJECT NO .:	090801056	PAGE _ 7 OF 7
PREPARED BY	R C Beal	

ACTIVITIES: - From midnight to 7 on there went gretting good trenches
were done from starting point to one mean PZ 85 all soil was
above the new action level of 10 ppm with so reading in the
huntle and the wife of the transfer to
breathers nove . Therein Mike and I started at 0700 promoting the
branch tranch for AT 85 and AI 84 at AI 84 There wis a steel
2" pipe that we dear under we missed it when drilling by millimotings
afon 4.5' southwest of AI 84 there is a count old directly under the
floor which encased two conducts unknown at this time whother then are
energinal, we turneled under that going to place your pipe. at AT 85
we drieted right through this same concerte and about 1/5 of one
conduct to my grows is it a dead line otherwise some body paggrobally
would have gotten tilled when we dulled. Ut 1030 work (stowater
would have gotten tilled when we drilled. At 1030 work (showthan propossing sell, we may have so troub exercted shortly often lunch. Magain
Figure laying spice and catching up to us. We broke for lunch at 1945 at
which time we had about 5' more of trench to dig. We found out that the
conduct on the west aide of the concrete slab is empty as is the two inch
supe which is very close to AI 84 we are come to cut those the where
They intersect the main trench because it would be to desticult to dig
and to lay pipe underneath them. Hagara testing again catching upo
To us. At the and of the shift 1900 the tranship was done, pin holes dulad,
Almos sweep, wellog (concrete) covered exsitutell covered and Niegon Piping
has appr. I'm high with they pressure test. The next whift went
considerably slower Maging Piping took 5-6 hours to make up a headen
to gressure test the pipe lines. Considerable Selan the and it will only
get worse next weekend.

Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: D9 0801054 PREPARED BY: BC Booken	G OATE: 1-21-94 PAGE 1 OF 2
PROJECT DESCRIPTIO	on: SVE System trenching in spection buildly	
WEATHER CONDITION	15: <u>rold</u> , snow, winde,	
SITE CONDITIONS: _	sur iovered	
PERSONNEL ON SITE HART: B. Ruder R. Bekan OTHER: H.R. C	s. C. Ketherford, J. Panko, K. B.	avingartaer, M. D'Eufineer
EQUIPMENT IN USE:	Min Rem. Tri 6as	•
	cavator, backhoe, hoe ran-	
CONTRACTOR:		

...



PROJECT NAME:	B7 Finerica	DATE:	1-21-94
PROJECT NO.:	09 0801056	PAGE	2 OF 2
PREDARED BY	C C Rok		

ACTIVITIES:
Not to much happened on site antil 1530 when Cerrone moved
The water dum outside of the fillers building to the SE SPDES
los tel worth of the trailing These days of water were emptyed
Totaling 200 gols BFC anwell at anon 1700 hours one a at
Totaling 700 gots. BFC arrived at app. 1700 lunger on out,
soll that it was strong to the ground and will the armed
Cerrone started has ramming at 1615. At 1630 Dan Puty informed
Cenone started for ramming at 1615. At 1630 Dan Puty informed me of the dicision to change the action land from 3 ppm to 10 pp
for soil being clean fairty. At 16:10 ise unearthal another gips
first under the concrete floor unknown whether its elictrical or just
abandon gipe - HNU reading in this area (near the small range of an
about on sipe - HNs reading in this area (near the small ramping in another wall) are quite high in the soil, but we reading in the
from the work area. Started soil example at 1845 diety soil
from the work area. Started soil example at 1845 diety soil
do above 10 ppm. I BH site at 1945.
· · · · · · · · · · · · · · · · · · ·

Hart	PROJECT NAME: BRANCE PROJECT NO.: O9 080 PREPARED BY: RC	nerica	DATE: 1-19 PAGE 1	-94 _ OF <u>2</u>
PROJECT DESCRIPTION	1: SVE SUSTEM	building progress		
WEATHER CONDITIONS	s: <u>celd</u> , windy, suc	wing, extreme a	und chill fe	actors
SITE CONDITIONS:	snow covered			
PERSONNEL ON SITE HART: B. Saliss OTHER: HAR FE	10 R. Becken, K. Bo	aumeja-tree, M. E	D'Eufinia.	
EQUIPMENT IN USE:			•	
CONTRACTOR:				
SPECIAL ORDERS /	FIELD CHANGES:			

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POJECT NAME:	BP Rimerica	DATE:	1-19-94
	090807056		7 of <u>7</u>
PREPARED BY:	RUBacken		

ACTIVITIES: The quarter does hereining up electrical will be done today, in my oper openion the building is essentially complete. M/N crew Isid out twenting for this week and and Keven ordered walls in the treatment limber. NYS Thomas was closed so bot couldn't drive home his or was the restrict the week) or I get him on airline ticket and chopped him at the amport.
Thrown has histing up electrical will be done today, in my specific the building is exsentially, complete. M/H crew laid out treatment for this week and and Kever ordered walls in the treatment limber. NYS Thrown was elosed so bot couldn't drive home his or was the restrict the week) or get him on airline ticket and chapped him at
Keven observed walls in the treatment linking. NYS Thomas was the sold of the treatment linking. NYS Thomas was closed so bot couldn't drive home his on was the restrict the week) or I get him on willie ticket and chapped him at
Keven stand walls in the treatment linking. NYS Thruson was closed so but couldn't drive home his or was the restrict the week) or I get him on wisher ticket and chapped him at
Keven aloned walls in the treatment building. NYS Thrumon was closed so bot couldn't drive home his on was the restrict the week) or I get him on willie ticket and chapped him at
was closed so bot couldn't drive home his on was the restrict the
week) or I get him on wile ticket and dropped him at
m an p. v
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	PROJECT NAME: PROJECT NO.:	0708010	56	DATE	1-18	-94 OF <u>2</u>
ıc <u>ıaren</u> Hart	PREPARED BY:	RC Box	ke			
ROJECT DESCRIPTION	N: SUE Suct	progress				<u>, , , , , , , , , , , , , , , , , , , </u>
EATHER CONDITION	s: <u>extremel</u>	y cold ch	'ull Factors	in the -30	,	
					· · · · · · · · · · · · · · · · · · ·	
TE CONDITIONS: 4	ing snow, ice					
RRADIC M. T	Joutes M. D					moles,
B. Rodus M. T. OTHER: N+A R	Jantier M. D. Jouts . P America-, FA					melos,
B. Rodus, M. T. OTHER: N+A, R. EQUIPMENT IN USE:	Jouts. PAMERICO-, FA	npire Stile,	Forgues			moles,
B. Rodus, M. T. THER: N+A, R EQUIPMENT IN USE: HART: AME	Jaction M. D. Plants. P. Anerico-, Fr	npire Stil,	Farques	_ Eléctric •		molors,
ERSONNEL ON SITE IART: K. Bown B. Rowles, M. T. OTHER: N+A, R EQUIPMENT IN USE: HART: ACME CONTRACTOR:	Jaction M. D. Plants. P. Anerico-, Fr	npire Stil,	Farques	_ Eléctric •		molois,
B. Rodus, M. T. THER: N+A, R EQUIPMENT IN USE: HART: AME	Jaction M. D. Plants. P. Anerico-, Fr	npire Stil,	Farques	_ Eléctric •		moles,
ART: K. Banger B. Rodins, M. T. OTHER: N+A, R EQUIPMENT IN USE: HART: NAME CONTRACTOR:	Josta M. D. Plants. P America-, FA	npire Scil,	Farques	Eléctric		
B. Rodus, M. T. THER: N+A, R EQUIPMENT IN USE: HART: AME	Josta M. D. Plants. P America-, FA	npire Scil,	Farques	Eléctric		
HART: K. Banner B. Rodus, M. T. OTHER: N+A, R EQUIPMENT IN USE: HART: NAME CONTRACTOR:	Josta M. D. Plants. P America-, FA	npire Scil,	Farques	Eléctric		

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MCI <u>aren</u> Hart

Mc <u>laren</u> Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	09080:056	DATE: 1-18-91	-
			uit and pulling un lights and sait Eigh	
Dave Hogo	and Por Long	show on site to	en (how their flow of a four to cold to a	Mett
to be fairly to daily obser Koven as souls Kevin as souls Kevin as to	Mike Bot and happy. They we walk to and one of the and collose which	rould like up to get any self took to	sed project to date of the solution to have in the solution for analyse world in the treatment	and
Muldú				
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PROJECT DESCRI	IPTION: SVE SZ	yeten your april		
	Salar	V1-17		
WEATHER CONDI	ITIONS: es/d, sno	· · · · · · · · · · · · · · · · · · ·		
	e cros		 	
SITE CONDITION	3		 	
SITE CONDITION	S			
PERSONNEL ON HART: K. Bau				
PERSONNEL ON HART: K. Bau	SITE: ingular B. Jelisis		 	
PERSONNEL ON HART: K. Bau OTHER: Ferque	SITE: ungentmen, B. Delisco son Elect. H+A	Empire Soils		
PERSONNEL ON HART: K. Bau OTHER: Fergus EQUIPMENT IN HART: NO.	SITE: mgentner, B. Delisie son Elect. H+R USE:	, Empire Soils		
PERSONNEL ON HART: K. Bau OTHER: Fergus EQUIPMENT IN HART: NO.	SITE: magantaen, B. Delisco son Elect. H+A USE: USE:	, Empire Soils		

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11-11
Mc <u>laren</u> Hart

DAMI		
PROJECT NAME:	BP America	DATE: 1-17-94
		PAGE OF
	D. C. Bricker	

	T	Fa + 1		- on site	then one o	till
TIMTIES: _	Farauson	1 12 1		2011		
<u>- isnury</u>	conduit and	1 dian	3.4/.	+ 1 +	2 4002 13	0
	Empire Soils. Todan ail or todan ail or	a Arillia	1 -1	N. gans	to sol to	-th
مهلام	todan and or	world three	dun El	- 0		
old off	5 a studie	area near	The county	and a		
(1.6		31 80	1 1 1	1 : 1 /	1 to a to	th
The	folor bul	1 1 1	Spoked Ares	M. M. 6-00	t 12/02 (77 <i>0</i> 0
sixt who	folor bule	Lead V	moone the	+ TI	22	P 1
+ ///	1 1/2 Ex 1/2 Fine-9	A TOWNS AM	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			¥ 1
an man	bed ! Clean So	D. Corrow	had one	men in the	2 8	1
ettler	had Sclean So	and just	up muse . I	hings med	of the Augustia	0:
				.1 1 2		2
In or	in meeting a	with the D	EC we tal	of about	the with I will	1 250.8
and way	in meetil, a	le for the	weekend.			
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	PROJECT NAME: BP America PROJECT NO.: 09080/056	DATE: <u>1-16-94</u> PAGE1 OF 2
ıc <u>ıaren</u> Hart	PROJECT NO.: 09080/036 PREPARED BY: RC Becken	1 /\04
	ON: SUE system filters building trenching	
EATHER CONDITION	vs: cold -5° F, snow	
TE CONDITIONS: _	SNOW, ICE	
	_	
ERSONNEL ON SIT	rentuer, M. D'Eufera, Bib Delisco, R.	Becker, J. Panko
ERSONNEL ON SIT	entrer, M. D'Eufung, Bib Delisio, K.	Becker, J. Panko
THER: NAA	Cerrone	
THER: NAA	Cerrone	
THER: NAM , OTHER: NAME , OTHER: N	Cerrone	
THER: HARA	Cerrone E:	
THER: NAA . COUIPMENT IN USINART: HUU	cerrone E: frontend looder, backhoe	
THER: NAA , OR COUIPMENT IN USINART: HUUCONTRACTOR:	Cerrone E:	
THER: NAA , OR COUIPMENT IN USINART: HUUCONTRACTOR:	cerrone E: frontend looder, backhoe	
THER: NAA . COUIPMENT IN USINART: HUU	cerrone E: frontend looder, backhoe	

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PROJECT NAME:	BP America	DATE:	1-14-93
	09.0801056	PAGE	2 OF 2
20004052 84	RC Becken		

T Tall C	
and 053 attempted green y box wa relinat a cell was reupen dir	As stated in yesterdays log (I ran on a little of we lost what day it is,) the slowable ground was pomend between 5200 c. At 0950 we poured the flow, finished surface and at 1800 to saw out expension juits but the concrete was a little to extend to had set my extremely fast). The surger diving vollogy and the emptical rat putting the material into shows of drawn the the experience of the clean soil we had stockpled next to the state expire all soil were staged at the extrance to the country of my palleto every were staged at the extrance to the country of on palleto every with goly. The flow building was cleaned up and tip shocked for field supply the everyone left site at 1400.

ALE ACIATE Hart	PROJECT NO	ILY FIELD ACTIVITY AME: BP America O.: 09.0801054 BY: C Backen	PAG	E: 1-15-924 E -1 OF 2
ROJECT DESCRIP	TION: <u>SVE</u> :	system building trenching		
EATHER CONDIT	ions: <u>extre</u> m	ely cold, windy		
	SADUL COM	ned icey cold		·
TE CONDITIONS				
PERSONNEL ON HART: K.Bala	SITE:	Delisio, R. Becken, 3	. Parko, M.	Dieufina, S.
PERSONNEL ON HART: K.Balan OTHER: N+A EQUIPMENT IN	SITE: yenther B. Cerrone I		. Parko, M.	D'Eufina, S.
PERSONNEL ON HART: K. Balandon Mart. N. A. A. C.	SITE: gentner, B. Cerrone, M. USE: , LeL	Delisio, R. Becken, 3	. Parko, M.	
PERSONNEL ON HART: K.Balan OTHER: N+A EQUIPMENT IN HART: NOU CONTRACTOR:	SITE: yantner, B. Cerrone, M. USE: LEL backhoes, ex	Defisio, R. Becken, i	ck, front end	

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DDO ECT NAME	BP America	 DATE:	H15-	94	
		 DACE	7-	057	
PROJECT NO.:	09.0801054	 FAGE		. Or	
DECOADED BY					

I ICU C
CTIVITIES: Saturday morning at 0315 excavation at the interior overhead
I THAT DRIVE IN THOUSAND INCOME.
Make I would be a second to the second to th
for the many and the mount of t
break up morning concrete flooring broke up the remainder of the floor in the exportion area their removed concrete and placed it into the
to some all and to some to some during which the processing
the total and th
the working of the same of the
1 IEW 31 a AF 25 0 The such of the state
100 1 to 100 (Sport) were transported to my
soils were stage tomporarily on peach ent of the existen cell. No action
levels were hit in the breather gove he did up grade to level &
1. It is the west and also on Sal as late to
was at lunch one wan saw cut appr. 3 feet of concrete which we up grade to level a for appr. 1/2 hours at 1545 when I left the wite there was
to level a for appr. 1/2 hours at 1545 when I left the wite there was
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
piper to the well hears and backfill. Execution was functed at 1900, Cerran
gregared heater and did some cleanup while Magin Piping & ran remainder of pressure testing this truck load of a flowable grout armed
at 0200 finished last poin at 0500.

ACIAren Hart	PROJECT NAME: BP AMERICA. PROJECT NO.: 09.0801054 PREPARED BY: R C Becken	_ DATE:
ROJECT DESCRIPTION	ON: SVE system filters building trenching	
MEATHER CONDITION	NS: Show, cold	
CITE CONDITIONS	snow covered, ice	
ATE CONDITIONS:		
PERSONNEL ON SI HART: Bro- R J. Panko, S. OTHER: H+A	TE: Porlus M. D'Eufina , K. Bangantien Farong Forguson Elect, Corrone	B. Delisio, K. Becker
EQUIPMENT IN US		B. Delisco, C. Becker
EQUIPMENT IN US	E:	•
EQUIPMENT IN US HART: HAU, E CONTRACTOR: L bruck	E: LEL, CO,	•
EQUIPMENT IN US HART: HAU, E CONTRACTOR: L bruck	E: LEL, CO, backhoes, fronte-olosoder, excavator	•
EQUIPMENT IN US HART: HAU, E CONTRACTOR: L bruck	E: LEL, CO, backhoes, fronte-olosoder, excavator	•

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MA
Mclaren Hart

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SPOJECT NAME:	BP America	DATE:	1-14-924
PROJECT NO.:		PAGE	2 OF 2
PREPARED BY:	RC Beeken		

i icu c	
ACTIVITIES: - Herqueon Electric still wring that welling has	
	inema.
The state of the s	
	 _
	<u>tc </u>
elevated using the same exercitor there soils were field	Serewed
elevated using the same extension but when transporte	of to
with an HUV and determined to be clean but when transporter	teres
A A A A A A A A A A A A A A A A A A A	
Al and a state of the state of	
gone of the rocks meanted. Progress was slow.	
Dhy arily 3	that
Mile Brian Keven Bob + I dog a shallow trench in the soil -	alta :
To the cold to law but will be	
I de la	
be realed. I lett with at 1850, Brian last at 2000 after which so	1. suen
was in change with Mike as H+5 and Kerin as runner or where	
needed.	
	<u></u>

iclaren Hart	PROJECT NAME:	C Becken		•		
التقوي الأبروان فوالمناز المراسات والمراس						
OJECT DESCRIPT	non: <u>SVE System</u> building pro	aress				
	huilding pro- trenching	in filter halo	ling			
ATUED CONDITION	ONS: _ saw, cold				<u></u>	
AIMER CUNUIT						
			······································			
TE CONDITIONS:	5000 +166 CENS	<u>~e2</u>	<u>. </u>			
<u> </u>						
			·		·	
		, M. R'EUG	mn B. Ro	dus Ro	Bocker	
ERSONNEL ON S	SITE:					
ERSONNEL ON S						
ERSONNEL ON S	SITE:					
ERSONNEL ON ART: T. Pank	SITE: Co. K. Baumgardner Empire Scil, WS	Johns-, F	mouson.	East		
ERSONNEL ON ART: T. Pank THER: LL+A, QUIPMENT IN L	SITE: Co. K. Baumgardner Empire Soil, WS	Johns-, F	Ísrauson	East		
ERSONNEL ON ART: T. Pank THER: LL+A, QUIPMENT IN L	SITE: Co. K. Baumgardner Empire Scil, WS	Johns-, F	Ísrauson	East		
THER: HAA,	SITE: Co. K. Baumgardner Empire Soil, WS	Johns-, F	Ísrauson	East		
THER: HA	SITE: Co. K. Baumgardner Empire Soil, WS	Johns- F	nguson	Elect		
THER: HA	SITE: CO. K. Baumgardner Empire Scil, ws USE: J. LEL Concrete saw	Johns- F	nguson	Elect		

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Mc <u>laren</u> Hart

DAIL	FIELD ACTIVITY TO		
	BP America	DATE:	1-13-94
		BAGE	
	09 0801026		
DOCDARED RY:	PC Becken		

TIMTES: W Johnson girked up materials will be book in the affection to fix up a few parties spotes of Johnson man your same broke. Converse browned in purpless and squarest needed for the son cutter this even. At this Converse and so belong a factory at the govern of the felter building flow as one as he started to the the building flow and the book the started for the cold found build be heard to extend the start that down and the lain he had to extend the sould be colded to extend the fact by at them and the hard to get a started to be the fact of the sould be greated to be the down the form of the form of the man developed by work for MIH appeared he would have had arman problems. Jermes was developed to worker the the same building pulling wine and installing roughest.	Hart			
Course brought in supplies and squipest needed for the son outton this even. At 1630 Cerrone and one laborer started action search for the can cutter of the felters building from as some as he started to the Miles D'Enfine absolute for a CC and found levels well above the action level of 25 ppm we shut him down and told him he had to get propring to exposer out doors - I left site at \$1830 but not 2200. I called the site at a few were told by Bot they were having troubly as I returned to the site to help out. No at ended typ outties are I returned to the site to help out. No at ended typ outties about what we expected to but we were few until ODES to do it. Cerrone was seriously sunder staffed he doed two gauge and if it wash for MIH personal he would have had serious problems.	TIMMES: :XX J	Edmen jack Dup materials	will be back in the afters	<u> </u>
Course brought in supplies and equipment needed for the sow outton this even. At 1630 Cerrone and one laborer started getting ready for the can cutter of the filters building from As soon as he started I the Miles D'Enfine absolute for a CC and found levels well above the action level of 25 ppm we shut him down and teld him he had to get propring to exposit out doors. I left site at \$1830 but out 2200 of called the cate of a source total by Bot they were having troubly see I returned to the aits to help out. No at ended typ cuttering about what we expected to but we were how until ODO to do it. Cerrore was seriously owner thatfeel he doed two guys and if it wash for MIH preserved he would have had serious problems.	to fix up a	en problem spots . Johnson	you gave rame back.	
cutting this even. At this Close and one source as he studied if the can cutting of the filters building from as he studied if the Miles D'Enfine absolute for a CC and found levels well above the action level of 25 ppm we shut him along and their him he had to get pipeing to explaint out doors. I left cite at \$1836 but not 2200 at called the cite at a few were their were having troubly so I returned to the cite to help out. We suffer typ outting about what we expected to but we were here until order to do it. Cerrone was derivable ounder that the doal two guys and if it wash for MIH personal he would have had seen any problems.	U (1	K wooded for the so	لدي
cutting this even. At this Close and one source as he studied if the can cutting of the filters building from as he studied if the Miles D'Enfine absolute for a CC and found levels well above the action level of 25 ppm we shut him along and their him he had to get pipeing to explaint out doors. I left cite at \$1836 but not 2200 at called the cite at a few were their were having troubly so I returned to the cite to help out. We suffer typ outting about what we expected to but we were here until order to do it. Cerrone was derivable ounder that the doal two guys and if it wash for MIH personal he would have had seen any problems.	(gume	brought in supplies and so	laborer utaited asterio and	, ¥
to the car cutting of the feeles soul found levels well above the to Mile D'Enfine checked for a CC and found levels well above the action level of 25 ppm we shut him down and teld him he had to get opinion to asknow out doors - I left ait at \$1836 but with 2200 at called the aits of more totally as I really like the were how were how in troubly as I returned to the aits to help out. We to ended hip autilia about what we expected to but we were here until order to do it. Cerrone was seriously ounder thatfeed he don't two quips and if it wash for MIA personal he would have had weren problems.	author this as	ven. At 1630 Carrone and once	Am Or non as he started	IJ
action level of 25 ppm we shut him down and told him he book to get pipoing to exposer out doors - I last city at \$36 but wit 2200 get pipoing to exposer told by Bot they were having troubly as I returned to the site to help out. We at ended hyp cutting about what we exposted to but we were here until 0200 to do it. Cerrone was derough sunder that the doad two gauge and if it wash for M/A personal he would have had serious problems.	for the can cut	the of the fitter to	I I lovely well above the	
get general to enter al moves told by Bot they were having troubly as I returned to the site to help out. Wo to ended typ cutting about what we expected to but we were here until 0200 to do it. Cerrone was scrongly ounder staffed he don't two guys and if it wash for MIH personal he would have had seen problems.	of Mile DEWIN	a chemical of	and tell him he had	tis
so I returned to the site to help out. We strand typ cutting about what we expected to but we were here until one to do it. Cerrone was seriously ounder staffed he don't two guys and if it wash for MIH personal he would have had seems problems.				
so I returned to the set to reep son the until 0200 to do it. about whate we expected to but we were here until 0200 to do it. Cerrone was scriously ounder staffed he don't two guys and if it wash for M/A personal he would have had seen as problems.	Il collect the a	to all moves told by Br	6. they were known hours	ئىت. سا
clout whate we expected to the dad two guys and if it washing on M/A personal he would have had seen problems.				١.
for M/H personal he would have had seems problems.	about whate is	e expected to but we were	Lad two guys and if it we	csh
	~	on an all punter blacked he a	1000	
Herouse continued working in the new building pulling wine and installed goodwit.	for M/H penso	was me would make make		
League continued working in the new building pulling were and installed, conduit.				2
installed soudeit.	Lerguson co	stended working in the new	building pulling were and	
	installed so	aduit.		
	1			
	<u> </u>			
		·		
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Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 09.0801056 PREPARED BY: RC Becken	OATE: <u>i-/2-94</u> PAGE <u>1</u> OF <u>?</u>
ROJECT DESCRIPTION	ON: SVE System building progress	
WEATHER CONDITION	NS: Sunny, high 35°	
SITE CONDITIONS:	snow covered, isey	
PERSONNEL ON SI HART: K. Bonney	ardner B. Dalisis, J. Panko, M. B. C.	
PERSONNEL ON SI HART: K. Banning OTHER: Ferquer	andren, B. Dalisis, J. Panko, M. D. C. on Electric, W. S. Johnson, Fraguio S.	oils, H+A
PERSONNEL ON SI HART: K. Boung OTHER: Ferguer EQUIPMENT IN US HART: AND	andren, B. Dalisis, J. Panko, M. D. C. on Electric, W.S. Johnson, Empire Si	orls, H+A
PERSONNEL ON SI HART: K. Romany OTHER: Forguese EQUIPMENT IN US HART: AND A	andren, B. Dolisia, J. Panko, M. B. C.C. on Electric, WS Tohnson, Empire Si E: LEL	orls, H+A
PERSONNEL ON SI HART: K. Bound OTHER: Ferquer EQUIPMENT IN US HART: AND CONTRACTOR:	andwer, B. Dalisis, J. Panko, M. B. C. The Electric, W.S. Johnson, Fraging S. LEL LEL	oils, H+A

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٨	ıc <u>laren</u> Hart

		ACTIVITY	LOG		1 12 61
PROJECT NAME:	78P	America			1-12-94
PROJECT NO.:	09.1	0801056		PAGE	OF
PREPARED BY:	<u> 5</u> c	Becken			

Hart PREPARED BI:
ACTIVITES: US Johnson - removed their sate Trailer, chambered floor foints, also up building and removed more moterials and equipment. They also uncovered the outside pads in front of the overhead doors.
ACTIVITIES: was building and removed more moterials and laurquest.
- also uncovered the outside pads in front of the overhead about.
have the list.
Terguson continued pulling were and a continued
Empire Soil dulead in the norming but the rig broke down before noon. They completed wells.
La completed wells.
safore nous and
the solution charge charges
laid out the treatment of the on MSDS for the
marlitud from to course of the curing additive
coment and will receive the to the the
Bot Parkfull was course of asked
Bob Parkfill was called at noon to see out tomorrows. I asked tranching layout he said he would be out tomorrows. I asked Mott P. to some out to the site on Triday for Don langebours visit
the Day of the said to the sai
and he said he was sending Break

/\F. /claren Hart	PROJECT NAME: CP AMERICA PROJECT NO.: OF OFFICE BULLET PREPARED BY: RC Bullet	
ROJECT DESCRIPTION	4: SUE System building progress	
VEATHER CONDITION	s: mild 27°-34° snow in norming	
SITE CONDITIONS: _	Slush, Show	
PERSONNEL ON SITHART: K. Baume OTHER: Cerrone	E. portier, B. Delisio, M. D'ERFIM. Forguson Electric, WS Johnson	A, R. Bocken Magara Piping, Empire
EQUIPMENT IN USE	EL	
CONTRACTOR:	packhoe.	
	/ FIELD CHANGES:	

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PROJECT NAME: BP America DATE: 1-12-94

PROJECT NO.: 09 0801056 PAGE Z OF Z

PREPARED BY: Recker

ACTIVITIES: WS Johnson personnel glaubting floor joints and sealing floor the smallest overhead cleanup is also being done. Jehnon thinks he Foromor night Franciscon Electric had it largest even in wine and conduit, me light for the Mishing have shime as or not per young they will be whopped 1-14. Seils dunged directly into the exectic call tomorrow they will clear soils. Corrone was called in late to assist in the dumping of sollog the exiter rell. BEC truck arrived at 600 % arrived at appr. 1000. Course had to dig the moranes drifts from in was in bis see t of Rell didustries and sand baggard. Cerrine we ded it answered Mudgare Pipeing delivered they're work trailer today Att fipollo Start removed their work trailer



		BP Finerica	DATE:/-10-94	
MCIAMO		09 080/056	PAGE1 OF	2
Mclaren Hart	PREPARED BY:	RCBuken	_	
ı ıaı L				
PROJECT DESCRIPTION	V: SUE Eys	tem		
	bu. Oding	pregress		
····	/.			
WEATHER CONDITIONS	: _ cold, cu	J		
SITE CONDITIONS:	icey, spow			
HART: MIKE D'E RICK Beyke OTHER: N+K Fergi	uson Electric, J	Delisis, Keim Baunga, Thusan, Empire Sorls,	ther, Julie Parko Domforth	
EQUIPMENT IN USE:	U U		•	
CONTRACTOR:				·
SPECIAL ORDERS / F	TELD CHANGES: _			
				·
				
	. —		خاور في المستقد والمستقد المستقد	



PROJECT NAME:	BP America	DATE: _1-10-97
PROJECT NO.:	4-5 05 1 - m4	PAGE _ 2 OF 2
PREDICED OV.	Profile	

ACTUATION TO CALL STORY
ACTIVITIES: Danforth on site this morning to replace the wester
the state of the s
theusen thetric still went with the trut of
the steeline to be in any belong.
the electrician does it seem to be in any human. Frommer removing forms from the motor/ purp pads that
former or freeze reserved from from the heart and
which for reasons linknown what here done fedor I to
doors are believe installed and dres only in her high is
to spice soils is drelling in the area worth of Take Course
Engine Soils is drilling in the area worth of Jak Censors will finish up area today. Spoke to the cress about dampine drives they are concerned that the aril will be frozen in the drives we will have to sheet that the soil will be frozen in the drives we
they are concerned that the and well be frozen in the draw we
and well have to check now ite base
to the form we could dumy reveral extrallito
the my ask a four wells completed today
We had a meeting with H-A and the DEC descensed progress
man har week and what we will be doing this week. Sue mentioned
we have a sample of the flowable grout and see to
pure its not continuented she didn't know what to a conclusion to
will to shaw about this he was going to call Dave Haam about this
to still marging on using contamental soil as backfull to limit the
soil placed in the cell. Keven of the DEC doesn't understand it
mether to gersonal feels it would be better to place the trough in
soil from the buelon in the cell as we do.



	PROJECT NAME:	BP America	DATE: _	1-6-93
Mclaren	PROJECT NO .:	المالية المساور	PAGE	1 OF 2
Mclaren Hart	רתנראתנט סז:	PIC 104CKEY		
PROJECT DESCRIPTION	1: 5VE Sic	 1 S b		
	AI, VEW			
	Smilding	erogran		
up. Tip. on inch	. a.D.1 1			∵
WEATHER CONDITIONS	: _ Oto, wind	1, onow		

				- 11
SITE CONDITIONS:	snow, care			
	·			
PERSONNEL ON SITE:				
HART: R. Daken K	S. Kerdus, J. Pon	Ko, B. Delisio, K. Bo.	ungartner	
OTHER: HAR CIR	Descrit F	impore Soil WS Johnso	m Fan	F. O: - # .
Cerrone		13 20 4 20 3 30 20000	- serginger	- Carellour
EQUIPMENT IN USE:				
HART: NOU LEL	·		•	
CONTRACTOR: back	<i>∖</i> 02			
005044 00000			·	
SPECIAL ORDERS / F	TELD CHANGES: _			
				
	<u> </u>			
			 	
			·	



PROJECT NAME: BF Fine/Ice PROJECT NO.: 03 080/056 PREPARED BY: RC Beaken PROJECT DESCRIPTION: SVE System building progress WEATHER CONDITIONS: wild, snow SITE CONDITIONS: snow Ice PERSONNEL ON SITE: HART: Bran Rajus Bob Delisio Kevin Boungartner Jul. OTHER: H-A, Empire Soilo Ferguson Electrics, Cerone, J EQUIPMENT IN USE: HART: HUU LEL	PAGE	1 OF 2-
PROJECT DESCRIPTION: SVE System building progress WEATHER CONDITIONS: Cold, Snow SITE CONDITIONS: Snow, ICE PERSONNEL ON SITE: HART: Brian Radius, Bub Delisio Kevin Berngartner, Jul. OTHER: HAR, Empire Soils, Ferguson Electrice; Cerence, J. EQUIPMENT IN USE:	e Panko	Rick Berker
SITE CONDITIONS: Show ICE PERSONNEL ON SITE: HART: Brian Radius Bub Delisio Kevin Berngartner, Jul. OTHER: HAR, Empire Soils Ferguson Electrics, Cerme, J. EQUIPMENT IN USE:	e Panko	Rick Becker
PERSONNEL ON SITE: HART: Brian Radus, Bub Dalisio Kevin Boungartiner, Jul. OTHER: H-A., Empire Soilo, Ferguson Electrics, Cerrone, J.	e Panko	Rick Berken
HART: Bran Radus, Bob Dalisio Kevin Boungartiser, Jul. OTHER: Hope, Empire Soils, Ferguson Electrics, Cerrone, J.	e Panks	Rick Becker
QUIPMENT IN USE:		
TART:ROU LEL	therity	Apollo
CONTRACTOR: back hor	•	
PECIAL ORDERS / FIELD CHANGES:		



PROJECT NAME:	RP Amorian	DATE: 1-6-94
PROJECT NO .:	<u>69080108</u>	PAGE OF
PREDARED DV	200	

ACTIVITIES: CIP was called in to check the operation of the two granulartes
in well PW-2 was turning on and off in appr. 10 sec intervals we thought the service in the sell well to
thought the sensors in the well night be nelfunctioning. Enque Soil has me crew on site driver in the
Enque Soil has one onew on site drilling in the onea north
to and across the road from the loan Cal Course The
Completed 4 willow
U.S. hadron commend the sale of the
the out of the goly structure covering and neurounde
the extense gards in front of the overhead doors, continued work on the interior garters including block and frame wolls built and placed
Interior fartions includes beach and from walls built and placed
There and notes pad forms and built a poly shreeting for the
Jump and notor pad forms all built a poly structure for the
-Terqueon Electric extremed wine in the lab low montrol wom
oreno, many he installing the sermonent rights lights tomorrow.
Cerrone worked on the exsite all placing three layers of
erosion must over the second blocks to protect the Read Ind
from sharp edges, then laying in Reef Industries starting at the
west wall and work and work it to it to it
it was sovered with an and (ground livestine) appr 10-12 over
was relaced to I come no to ?
was placed and compacted with the back hoe times with
we were confident that the lien could not be damaged while
filling the sell. Cerrone had delivered three loads of ag earl.
and had one open one freman and one laborer.

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٨	ıc <u>laren</u> Hart

	PROJECT NAME:	BP RMerica	DATE:	1-5-94
viciaren Hart		09.0801056		
ROJECT DESCRIPTION	4: SUE Syste	~ _	······································	
			10	
EATHER CONDITIONS	: windy, cale	1 snowing		
ITE CONDITIONS:	ledy, soon			·
				· · · · · · · · · · · · · · · · · · ·
ERSONNEL ON SITE: ART: K. Bonga	tren, R. Dile	no, R. Recken J.	Poko	
THER: HER JO	hum, ACI.	Donforth		
QUIPMENT IN USE:	EL, OVA		•	
ONTRACTOR:	k hòo			
PECIAL ORDERS / F	TELD CHANGES:			
	·			



PROJECT NAME:	PET America	DATE: <u>/-5</u> -934
PROJECT NO .:	09.080/056	PAGE OF
DOEDADED DV	Ca Book	0,

ACTIVITES:
every I was simbing fine.
entra I was working fine.
W5 Thron - The librar wells were completed for the MCC mon, all but
and confied was removed, dry wall on the lab was stuted weren and
plumbers being done in the late, law and control mon, attacking for
the control wom was done. Forms being built for the pump motor pado.
Hert turned eff on the outside pads but blankets still covering the gods
and one wall (east aide) was removed from the galy employeer.
There she worker on exterior does and laying ord and installed
Apollo Stel working on exterior doors and laying ord and motalling
Apropuson Electric wiring the lab, law, and control room
Nicagara plumbing the lat and low.
Conserving the conference could with BP, Carice, M/A, HVA it was
said by Ron Spens that Envir Soft in Organ Whis was not an acceptable
addisposal site and that I should rample the PPE and analysis for
Total Orani & alyan which per for Spens (Carle) says will tallow if
and the second of the second of meet will
Sue Forth and Margret Boun of HAF and was tiled by Margret that Carle had
transfer that approved to M/H is would save doing any analytical and the approved
The approved in MAN is would sive down and article and the approved
Time Margret and she would talk to Rox Span about it. Margret entred me
the following week and said she had mad a mentale or men indication agreeme.
in reacrds to site previously mentioned expressed best never mentioned that
I was not rellowed a use twouldle owen though she know I planted to
analytical that we will be brilled for.
analytical that we will be hulled for.



	~ > ^	
PROJECT NAME:	BP Firmerica	DATE
PROJECT NO .:	09.0801056	PAGE
PREPARED BY:	Rc Becken	

ACTIVITIES:
Cerrone was here for a very short while as than I four
The state of the s
the wach to the shop and get some Things ready to the week!
the all the all the area of the control to
block so to putest the liver from sharp edges al corners on the
block. This was moterial he had at the above so we made a deal
I how of operator time and and 2 hours of laborer time for the natural
Getting back to the disposed come of orginally sugarated cum in
Model (ites because of its closeness to the outs bid in the I went
that Carte had a mother with from because of
Model (ity because of its deserves to the cite but was told by Margnet that Corbe had a problem with com because of approval times on I that was when Ervine Sofe was first mentioned.



	PROJECT NAME:	BP America	DATE:	1-4	- 93	
MCIAMO	PROJECT NO .:	09.050,056	PAGE	1	OF _	2
Mclaren Hart	PREPARED BY:					
ा ता ८						
PROJECT DESCRIPTION	1: SVE Sucto					
Liveden	ed holding progr	<i>1</i> 845				
	1 7		· · · · · · · · · · · · · · · · · · ·			
						
WEATHER CONDITIONS	cold and	1 SMC NIKG				
					·	· · ·
					· · · · · · · · · · · · · · · · · · ·	
				·		
SITE CONDITIONS:/	czy snew					
						
						,
PERSONNEL ON SITE:						
	K. Barngosthe	J. Panko . B. Delis	<u> </u>			
	<u> </u>	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·
OTHER: H+A John	isen, Donforth	, Lerguson Fleatric	Empire Se	ils		
•		1	7			
	· · · · · · · · · · · · · · · · · · ·					
EQUIPMENT IN USE:						
HART: LEL, OVA	HNY		•			
CONTRACTOR:						
POPOLIA ACCES						
SPECIAL ORDERS / FI	ELD CHANGES:					
	•					
	· · · · · · · · · · · · · · · · · · ·					
		_				· · · · · · · · · · · · · · · · · · ·
					····	



	· -	_
PROJECT NAME:	RP America	DATE:
PROJECT NO .:	09 080 1056	PAGE OF
PREPARED BY:	Rc Becken	

ACTIVITIES: Johnson percount on the black works for the MCC
room, also framed (ptieds) the control com I believation and
I wonter that was \$100 mg of
landing. Heat was still on in the poly enforcers evening the
- The Deplet of the Deplet of the
Tenouson Electric wired the scontrol room lot and low also
pulled some under ground wire
·
Someone was here over the holidays (Friday- Wilnelow and installed) the chains of the roof ridge wents. Unknown to any I was the fact that the vents when installed & were left open.
the chains of the root redge wents. Unknown to and I will
fact that the vento when intalled at were last
Emiliar Soul Land
the the state of a sing of the state of the
and for the factor (server the road). By the sund of
Engine Soil had one new working to lay, they drilled in the onen with of the Lake Conrone (very the road). By the end of the day they had completed 4 wells.
Donnforth had been called yesterday (Morday the 3 de be H+R because of a grobben with PW-1, the pumps suched up to mall
H+h because of a grobben with PW-1, the pumps suched up to mall
and the same of th
the the the the the time to the same to his many in
was shot, he could be had nade up a straight pipes to install in the
glace of the nature which would allow us to exerct the pumps. I spoke
to Dave do Time + 11 D +
to Drive who in turn talks to Dave Hagan about it who approved the
Touson use as such I called Ron Reason and told him to and a crew
the the of a pure and would better of a new
The state of the s
he to oder I when the new wontell the pipe we turned the austin
his to order it. When the crow of totall the pipe we turned the another on and it was frozen. Closed tis well bot up for the right and wheal Destrict to the right and wheal
Destrict to come back out tourses.
Dowe Norstand of H+A till me that D. H.
Dove Northert of H+A told me that Dave Higan agreed that weep toles in the well carried for the purpose of draining water ent of the well boxes was receptable to H+R and BP rather than sumps and and additional sumps.
sounded to the I DD is to
in 18 1 that DI rother than sumps and and additional summer

1-5-94

Apollo Steri AGREE'S to hook

UP the ROOF VENT. SO THAT THEY

ARE ABLE to be OPENUED & closes by

Chain operation in Exchange FOR

Cleaning of the MUD ON the INSULATION

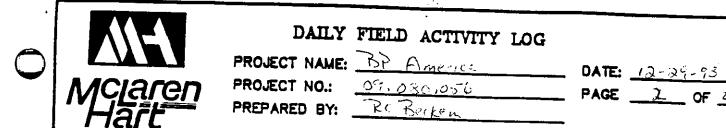
EL BLOG. MEMBERS. CLEAN UP to be

done by OTHERS.

Kichand Beb.
Mclaren Hart

Mclaren Hart	PROJECT NAME: PROJECT NO.:	FIELD ACTIVITY BP America 04.0801056 RC Bocker		DATE: <u>/2</u> PAGE <u>1</u>	-2?-93 OF
PROJECT DESCRIPTION	li <u>Sue Sys</u> building ex situ s	te - progress ell progress			
WEATHER CONDITIONS	cold.				
	^	2			
SITE CONDITIONS:	TETRA Show C	overe c"			
PERSONNEL ON SITE: HART: R. Backen	B. Delisio		· · · · · · · · · · · · · · · · · · ·		
OTHER: HAM JOS	unson, Aprilo,	Cerrona			
EQUIPMENT IN USE:					
CONTRACTOR: hack					
SPECIAL ORDERS / FI	ELD CHANGES: _				
					

÷.



Mc <u>laren</u> Hart	PROJECT NO.: PREPARED BY:	09.080,056 RC Becken	PAGE OF
ACTIVITIES:			
		マベー・コーレングスクシステー・バックス	orchete block inside The
men wes 70°	around beneat	on main de ()	chustines housing the pad
		? &c	
second truck on	Transit Vocant Zin	10755 No. 10755	is going to cope and high of took 3 copy expender
Cenone is me blook yet by-	man short Tor	day Vince as nick	to place Real Industries.
Apolle Stort pers	onel are age the doubt d	on in the north o	doors at present they
			



Mclaren Hart	PROJECT NAME: BP American PROJECT NO.: 09.0887856 PREPARED BY: RC Booken	
	N: SVE System building progress	
	S: wild 40 chill factor well below	
SITE CONDITIONS:	Frozen snew coveroil	
PERSONNEL ON SITE		
HART: R. Becke	Electric Half Tohnson, Appt April	a Hoel, Cerrone
EQUIPMENT IN USE:		•
CONTRACTOR:		
SPECIAL ORDERS /	FIELD CHANGES:	



PROJECT NAME:	BP America	DATE: <u>/2-29</u> -65
PROJECT NO.: PREPARED BY:	09.0801056	PAGE 2 0F 2

ACTIVITIES: Ferguera Floritos en sita et asea et 11.01
ACTIVITES: Forgusen Elector in site at 630 they will be forhing wire they conduction I if possible installing lights. They only weaked until for these would amount moin for their
would amove he tis
Towns of the test
and the transfer of the way by and the
poly otructure of governor level was 28'. I stopped by Tix acts yesterday
the think confirmed it was In would the health on
and just plan and in the pole attractive. Unless the temperature outdoor
rises they will some get the temperature up to 40° in the goly cotructure.
I more on site working on the block well and wound poly attraction of
the he the foreman about temperature and he said The will be
delivering a 350 sec Ate heater for the two poly attentions that man
The state of the s
the first war and of contrain and the world we to the extraction
The 350 sa Brochenter should a time job it was quite were in twee at 1700.
Facillo Ital has two inan workers how to install down lith me had
lean previously here. By the and of The day then had intilled for done
Apollo Stell has two iron workers how to install down both men had been previously hope. By the End of the day they had installed for down on the north and west walls.
Concerns don't man have water on the quest no in the
Correre has 3 men live working on the existing cell removing the sund
the high aports. Welking al few low sports with what stone available
in oit all the last so the state with a sould be
in site pleasant or block valler. I teld Vince to make the cold 55' wide
and for now a only to 45' long. Provinces show

Mclaren
Hart
PROJECT DESCRIP

MCIAREN HARE	PREPARED BY:	BP America 030/056 Rc Becken slam rogress		
WEATHER CONDITIONS	3: <u>cold</u> was	dy, and		
SITE CONDITIONS:	fragen			
PERSONNEL ON SITE: HART: R Becken OTHER: Hake				
EQUIPMENT IN USE: HART: CONTRACTOR:	٧		•	
SPECIAL ORDERS / F	TELD CHANGES: _			



PROJECT NAME:	BY America	DATE: 12-24-93
PROJECT NO .:	0801056	PAGE 7 OF 2
DBEDADED DV	D C Roal	

ACTIVITIES:	
up block world in side the was building.	
CIR cons care in the constant that are the	
Time yesterday was in sit; about 2 hours.	
The state of the s	
I se also to top of his	
I skunder the trail and finished up some gager wok.	
I should fell + BPW2 at 1045 1 de	
water in the letter of the control of the land of the letter of the lett	
the treatment of building at 1000 the temperature was 350 Johnson	
had me oreales of don one to their and had in the	
does and talled to Steen I show to their poly building of closed	
don and talked to Steere, Johnson foreman about heating grables.	
asked if he thought that it would be enough because we are soften	
to get contraried and the termination of the second we are second	نما مرین ^د 1
he sufficient.	d
All of Johnsons people out by 1300. I was gone by 1400	
	
	
	

114
Mclaren Hart
BBO IECT DESCRIP

MCISCOD	PROJECT NAME: PROJECT NO.:	BR America 0801056	DATE: <u>/0_23-93</u> PAGE1 OF	<u>z</u>
Mc <u>laren</u> Hart	PREPARED BY:	KC Bicken		
PROJECT DESCRIPTION	VEW RIX	te- PZ well installation		
		progress		
WEATHER CONDITIONS	: cold, snow	SURING		
SITE CONDITIONS:	trozen			
	·			
PERSONNEL ON SITE: HART: K. Brunger	toner, B. Delle	isis- J. Kilcer , R.	Becker	
OTHER: H+A, W:	Tohnson, Don	forth, CIR. Emy	pais Sul	
EQUIPMENT IN USE:				
CONTRACTOR:			· · · · · · · · · · · · · · · · · · ·	
SPECIAL ORDERS / F	TELD CHANGES:			
	· · · · · · · · · · · · · · · · · · ·			



PROJECT NAME:	RP Arance	DATE:
PROJECT NO .:	$\Delta \alpha = -1$	PAGE OF 2
PREPARED BY		

ACTIVITIES:
WS Johnson crow continued working on the block wall they are
within 45 courses of the not also me then are building
hursding where the outside pade will be proved to the protect
the onen I heat it (I still don't think it will work.)
Dougath finished installing the piper for the Two ground water wells to 1 + PW2, they also wanted here while CIR finished wind
wells Pw1 + Pw2, they also wanted here while CIR finished wind
There have world be a gratition when they are quinter were testal
When we strated IW-I we had several miner problems 1)-the islied
walve was set to high for the pump to open it ? The pump sucked
up some out a crowd which dodied in the sold value and
the test to be proved and chand and in which
the world worked fine. PWZ when started worked great nothing had
to be changed or fixed, his rould'it shock whether the artenative.
switches an will work because we couldn't gung enough water out
to lover the water level for the sont outerates prototon to turn off
either scump. We gamped 2100 gallows out on PWI and 1600 gallow
CIR philips ag the man and town but to
Stave heat train on spone piping, and short rection or piping for PWZ in the west soil of the road is powered from the straige trailer
for PW2 in the west side of the road is powered from the state to the
(for heat tracing).
area then sot up parous the word in the small transflar area directly
area then set up priors the word in the small transflow area directly
morth of take Consone.

Mclaren Hart
Hart
PROJECT DESCRIP

Mclaren Hart	PROJECT NAME: PROJECT NO.:	BP America 0801056 RC Backen	DATE: /2-	
PROJECT DESCRIPTION	N: SVE System AI No. 1 St. AI	tem F. + PZ wells progress		
WEATHER CONDITIONS	s: windy, col	d, snow		
SITE CONDITIONS:	* Icey, mud	dq, wet		
	dner, B. Delisie	c, J. Kilce-, R. K nson, Cerrone. Da		
EQUIPMENT IN USE:			•	
CONTRACTOR: done	r, compactor			
SPECIAL ORDERS /	FIELD CHANGES: _			

. :



PROJECT NAME:	BP America	DATE:	12-22-93	
PROJECT NO.:			OF 2	
PREPARED BY:	R.C. Baken			

ACTIVITIES:
Empire Soils worked in the south area ((ake Cernone) today coughting if wells. Tom was here to dung drums but the evene was broke; buy the time has had getten parts they (Empire) pulled him from the job.
coupleting 4 wells. Tom was here to dung drums but the creme
was broke , by the time has had getter parts they (Empire) pulled
him from the job.
Dandoth continued kiping for the ground water wello PW-3 in
lin from the job. Dougloth continued piping for the ground water wells Pis-2 is complete as in Pas-1 a.
CIR still working on the electrical book upon they will be alone
Compress and we can test each then.
Coreme product the next neco in host of the hall I ?
store as a lose and composted in exercise to the and the day
by Cerrons worn the installation of the Biles done on the samuel of
Coreme proceed the good areas in front or the new build Reil more stone as a lose and composted in preparation for the goods. Also done by Cerrone was the installation of the Belies done on the groundwater well boxes.
Johnson brought in more block and also did appr. 10 courses on
the most and sont wall over the older on the of flow for the
the north and cost wall over the older section of floor. File Thated
the confine done of hid it has I to led to the total
able to keep the free of a love to the teline that some will be
able to keep the toperature above 40 in a poly onclosure roughly 8'x 50'x

114
MC <u>laren</u> Hart

	PROJECT NAME: Dr. Hmenica DATE: 12-22-93
MÇ <u>laren</u>	PROJECT NO.: PAGE OF
"Hārt"	PREPARED BY: J. Kilcer
ACTIVITIES:	1) Log-
	A) Sign IN Sheets
	B) Izil Gate Satety Report.
	C) BURNING (HIT WIRK PERMIT)
	2) PREPERE:
	A) Sign For Shorts
	B) Tzil Gete meeting
	C) Hot Work Permit.
	3) Conduct ? Site Health & Satoty Opentation
	meetings for Johnson's People.
	4) 9:30 Am Told Johnson former that I
	would Like the Steel Toe Shoe Problem
	Resolved By Noon Date -
	[Note] was Done
	5) Askel Cennone About Above Issue -
	He Stated He did Not Have Shoes
	Would Not be book until Tuesday
	would Discuss st then.
,	6) Soil Samples
-	

Mclaren Hart	DAILY FIELD ACTIVIT PROJECT NAME: BP America PROJECT NO.: 0801056 PREPARED BY: Rc. Becken	Y LOG DATE: 12-21-53 PAGE 1 OF 2
PROJECT DESCRIPTIO	N: SUE System AT VEW-PZ wells building progress	
WEATHER CONDITION	s: snowing, cold	
SITE CONDITIONS:	wet, muddy	
PERSONNEL ON SITE HART: K. Baumg	antie, J. Kilcer, B. Delisio,	R. Becken
OTHER: H+A, E.	upire Soil, Johnson, Vaughn Do	on, Cerrone, Danforth, CIR
EQUIPMENT IN USE:	EL	
CONTRACTOR:	ackhoe, dozer, compactor, a	man lift truck
SPECIAL ORDERS /	FIELD CHANGES:	



PROJECT NAME: BP America DATE: 12-21-93
PROJECT NO.: 0801056 PAGE 2 0F 3
PREPARED BY: RC Becken

ACTIVITIES:
Empire Soils had one crew on site working in the worth area
formerly called take (errore, they are still haven nechanical problem
with their rig but they did get 4 wello doe
Cerrone was doing contract work, but because of poor acheduling
he didn't accomplish week he was doing to grade and compact
the parking area by front of the overshood door a where the
well be installed but first Johnson was in his way them Variab Don
was there installing the overhead door - Cerime did try to open
up the drawings ditch on the south side of the filters building but
all he manged to do was track an AT well casing (AI 1/8). I
Told him (Vi (errore) about it and told him to we would check
to the of we could fix it fate in the day Cerrine was suestioned
about otell wed shoes which he said they don't when that DSHA doesn't
require them, it told him M/H does require them there were and
In the H+S than that he and his crew had someth of on we man
a thing all of the bub contractors on this was
Wis forther was prought in concrete block and suffered us to get ready
To want to the well next week. He was told the only way be wan
allowed on the great concrete floor was to lay plywood down to protect
total to be felley on the new floor. Stal tol
mence may be a problem for too.
- Vaughan Door personnal arrival on site, went though the H+5 or soutation
but was not allowed to work because of ottel tol alives the crew left
site but returned with steel tred boots. They killed the rolling one had
doors on the green concrete and also maded un tel Man Rd
The Than 1000 about the and we told him the floor would be liked
all the cubs and we can
in was new responsibility not ours, he was to have a man have daily to over see
by such ver occording to the pear in placet he basit been here since 12-14 and
he was only here for less than one how. Frank sent a guy out to the site
the face the the times are nel state managed man to the last him
the schooled ten the holidays and that was a point we were trying to get ocross to track.



				
PROJECT NAME:	BP America	DATE:	_12-21-93	
PROJECT NO .:	0801056	PAGE	3 OF 3	
PREPARED BY:	R C Becken	•		

ACTIVITIES:
Donforth Mechanical installed the pumps into PW-1 and PW-2 & prefabled pipers of a miscale - the well boxes. CIR continued running electrical lines from the power source to the well boxes.
piping of a misible - the well boxes.
CIR continued running electricial lines from the power source to
the welf bakes.
- Ferguson thatic had a man here in the morning but he couldn't
Herqueon Electric had a man here in the morning but he couldn't do anything because Johnson had concrete blocks pulled all over the place and scapfolding in his way also.
and staffstating in his way also.

111-1
Mclaren Hart

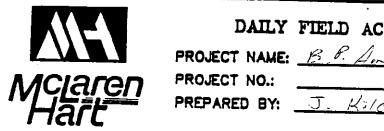
Mc <u>laren</u> Hart	PROJECT NO .:	B.P. America. J. Kilcer		-21-93 OF
ACTIVITIES:	Hezith 6 People - L+1)	Did Not Sign in went here	with Vaughu on otherwise Le	- us Know they
	Advised Advised	Johnson People Clorpus of Sa Censure fees	to here Stee time - pould in to Neg	1 Tue Shoes ztive Fashen -
	Sant Analized	Decoil writer HNU Bock Con (2nd Recond	ed Soil Sen	inste
		C.IR. Elect where for + Tape		

0	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America DATE: 12-20-93 PROJECT NO.: 0801056 PAGE 1 OF 2 PREPARED BY: RC Becken				
	PROJECT DESCRIPTION: SVE System VEW. AI + PZ well building progress WEATHER CONDITIONS: cold, overcast, rain - snow, wady				
	SITE CONDITIONS: wet, muddy				
0	PERSONNEL ON SITE: HART: K. Baumgardner, B. Delisio, R. Becken, J. Kilcer OTHER: 14+A, Cerrone, & Damforth, CIR, Johnson				
	EQUIPMENT IN USE: HART: HNU, LEL CONTRACTOR: backbae, drillrig				
	SPECIAL ORDERS / FIELD CHANGES:				



PROJECT NAME:	BP America	_ DATE: 12-20-93
PROJECT NO .:	0801056	PAGE 2 OF 2
PREPARED BY:	Rc Becken	

ACTIVITIES:
Cerrone deaning up soils left from the trenching for PW-2, also
general water for 10-1. (errones laborer motellal)
the thousand in the well boxes for PW-1 + PW-2, some left over pand
to firster around FW- well box to somewhat elevente the sund
be tracked into the box. The words were perspent to clean of the med.
- Johnson poured the renainder of the concrete floor beginning at 0830.
at short time the temperature of the building was 44° by the third had temperature
If the building had gove exp to 46. Damples of the concert to be
first, second and frist looks. Fouring was completed by 1300 with Johnsons crew finishing for the rest of the day.
crew finishing for the rest of the day.
Terguson was not on sets and there was some concern on to what to
do should a conduit get broken during the pour Bob called Ferguen
Chetric and their answer was if a conduit away by the to a le to
Electric and their answer was if a conduit was broken to call the
I purchased a small sums ou so to be used to
Pw-2 well box when reeded.
Engine worked in the pouts area which has been art of the
to include take cenone, 4 wells have been done that The
to include cake cerrone, 4 wells have been done to today main one
Samples of the PPE were taken and dolivered to Advanced Environmental
Services do disposed and air Manut R. 1511 A. 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Services for disposal analysis, Margret Bonn of HAA called earlier to tell
me ale had mistaken the & disposal approval that Carbo previously had
it vasnit for desired landfilling but incurration
<u>-</u>



M <u>claren</u> Hart	PROJECT NO.: DATE: 12 - 20 - 93 PREPARED BY: J. Kilcen
ACTIVITIES:	STEN IN Sheet.
	Teilgate Health & Schoty
	Calibrate Hau's.
	Log- Direct Air Manifornia hoss-
	ATIR Sample PW19 PWZ Vzults-
	Set up Decon Hzv Am. Dispose of Door Hzv- (Partial)
	·
	Sample 50:1 & Log -
	Hot Work Permits
	Superiose Soil Dumping suto Rull-off - Denne Superiose P.PE Sampling.
	Thouse The Dampishy
	
	
-	
• •	
	



MCIaren Hart	PROJECT NO.: PREPARED BY:	BP America 0801056 RC Backen		
PROJECT DESCRIPTION	li SVE Sy AI, PZ building	ster + VEW wells progress		
WEATHER CONDITIONS	nice but	; 6 2 l		
SITE CONDITIONS:	drying			
	·	er, B. Dolisio, R. F		
EQUIPMENT IN USE:		isony (prone,		
HART: <u>ANO</u> , LEL CONTRACTOR: <u>backh</u>		g, jumping jack	•	
SPECIAL ORDERS / F	TELD CHANGES: _			



PROJECT NAME: BP FIMENCE

PROJECT NO.: 080/056 PAGE 2 OF 2

PREPARED BY: RC Becken

ACTIVITES: Corrore had the news here one crew morking the front well
ACTIVITES: Corrone had the news here one crow morking the first well the PW-1 trenches laying the conduit and water line, bookfully and
grading. The Second over did the same and back at PW- with
the exception that they is out have to get across the the read.
Alter transfer Road about the same land in the transfer of a land
After translate Roef Andesties was loyed in the translate a layer of soul was placed on the Reef Ind. for streeting the the pipe on conduit
internal Alt III
was in-stated. Afterwhich was sand was expliced over al and the fige of conduit then the Reaf Ind. was cut al folded over the coul on the trench was back filled use the coil provincials due out of the trench transfer was done once the trench was 3' deep to less, at deeper points tamping was done was done having the backfore bucket.
and the second with the second of folded over the
and and the train was wack filled use the soil proposally due out
of the breach though was done once the truck was 3 deep in
less, at steeper points lamping was done hair the backfor bucket.
in the sew building and bulloned it up for pouring on Morday.
in the new building and bulloned it up for pourie on Morday.



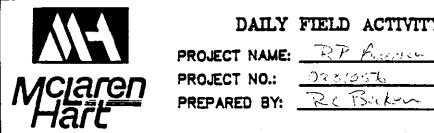
DAILY	FIELD	ACTIVITY	LOG
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Mc <u>laren</u> Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	B.P. America	DATE: _/2 PAGE	OF
ACTIVITIES:	Prepen	e Dzily Papen we	nK.	
		A) Sign In Sheat		
	·	3) Tzilgate Safety Czlsbrzte Precint		
	(c)	Czlsbezte recent	- HNU'S	
	Assemble)	End of wealt Re Make Copies	Polits -	
	· · · · · · · · · · · · · · · · · · ·			
	Do Herl Sp.	ree Rerdings-		
	Sotup	Decar-		
	bevery 2	Site Saloty Survey	n C (/ T	
	A area -a	Ascussim h	c staty, Re	noking
	······································			
	··			
	· · · · · · · · · · · · · · · · · · ·			
	 .			
			·	-
· .				
		·	•	·
		·		



DAILY FI	ELD	ACTIVITY	LOG
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Mclaren Hart	PROJECT NO.:	Br America OSO1056 RC Becken	DATE: <u>/2-16-93</u> PAGE1_ OF	2-
PROJECT DESCRIPTION	•	gsting Int P2 wells of frequess		
WEATHER CONDITIONS	: celd sun	ny them prescut		
SITE CONDITIONS:	meddy bit	drying		
	B. Delisco		Backen B. Radus	
EQUIPMENT IN USE:	دا		•	
CONTRACTOR:bes	khez, drill ri	ç, !		
SPECIAL ORDERS /	FIELD CHANGES:			



PROJECT NAM	E: RP Philopien	DATE:	12-16-93
PROJECT NO .:	028105Tb	PAGE	2 OF 2

ACTIVITIES:	
France Lie Date conduit which would have and	_
in grothers as mentioned give yesterdays log Edotices was	_
In purities is mentioned of in quantity, von exclusion was	—
7.112 xx - x	—
folian framed and concrete for the more funch	<u> </u>
pado south it the skill pools also placed water of sourcete	
that had been poured continuen.	
That had been poured continuen. Fingure drilled in the north area completion 5 wells.	
Correctable of PW-1 for the conten line running from the	
well box to the existent show ground water lines. Also trended	
to the water lie and power line to PWZ. Encountering minor	
covering on trench coally PWZ + PWI we will have to the all	
To our work from outside the trench.	
Danforth fabricated pine (waterlier) for PW-1 and PW-2	_
it will be hydrostate tested tomorrow them placed in tranth.	
CIP and the Arment to will are alcoholish in	_
CIR son power line from source to well ones excluding in	
trench areas.	
	1
I gether up 2" exethere insulation board from Thermal frame	-170
in Buffali	

мсіагеп
Mc <u>laren</u> Hart

DATLY	त. एम एम	ACTIVITY	IOG
	PERM	MC IIIII	

VIZA	DECT NAVE	B. P. America		ATE: 12-16-93
	PROJECT NO.:	13. 1. 17/1. CHIL		AGE OF
MÇ <u>laren</u>		J. KilcER.	F	
Hart	THE CITED OF	- 111000		
	1) Sign In			
	2) Tril Gate		". .	
		vzten Supoly Vztevi dospuszl		
	5) Site Site	ofy Plan Revi	en for 1	IR. Electric aud
	& Denfuth	mechanical		
6			ApproveL	F-zll protection
	System in	Bucket TRuc	K.	
		//	<i>j</i> 1	
	Trench O	Ullapse SIV RZ	en et Folg	ens Bldg - (Pwz)
		Delecio- No c		
<u> </u>				ry SW TREACH-
	WORKING SIN	Theretz = We	Tere Technoli	1
9,	Herd Spec	e Readings	From Beni	いうら
- 11) Ho-1 Sp.	rec Rendment	S-Din TON	ob at(PWI)
		8 250 Ppm.	3 /2011 / /24/	
				<u> </u>
	·			
	•		····	
i ,				
	<u></u>			
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-		-		·
\	-			
1				

MClaren Hart
PROJECT DESCRIP

DAILY FIELD ACTIVITY LO	0	L	TY	ריד	N	Г	C'	A	T.I	Œ)	F	Y	IT	ח	
-------------------------	---	---	----	-----	---	---	----	---	-----	----	---	---	----	---	--

Mclaren Hart	PROJECT NAME: PROJECT NO.:	BP America 19.0801056 RC Ricken	DATE:	1,5/93 OF <u>8</u>
PROJECT DESCRIPTIO	VEW, A	yster II + PZ welk ig progress		
WEATHER CONDITIONS	s: overcost	, cold, windy		
SITE CONDITIONS:	muddy het o	(ying		
	adner, B. Delk	rone, Farguson, Jo		
EQUIPMENT IN USE:				
CONTRACTOR:	ckhor,			
SPECIAL ORDERS /	FIELD CHANGES:			



_ _ _ _		
PROJECT NAME:	BP America	DATE: <u>12-15-93</u>
PROJECT NO .:	09 090 1056	PAGE OF
PREPARED BY:	RC Becken	

ACTIVITIES:
Tolongon pour concrete the money die lord of
site before 1300. A can of floor done is almost hall to the 100
space they started on the east and and congested the onen up to
the west side of the second tank and Text only do The
the west side of the second tack ped. Tost replinders were take for
four which the electricians fixed muediately
Engine Soils with one drill ones is working in the worth and
Empire Soils with one drill new is working in the south area and duringer soil during onl PPF. They completed & cells today.
Cerrone shaw up the soils he had due out to the placement of the well boxes paw out the ward, scriped the road summed the water out of the Piv 2 well box layed out where to die trenches tomorrow
of the well boxes can cut the wand, sommed the road summed
the water out of the PWZ well box layed out where to die trenches tomorrow
We've got problems in the new building on to the conduit in the
where I am are spots in the stoon where you won't have
1/2" of concrete because you have a 3" conduit , a 2" conduit on
top of that and then rebar on top of that.



	PROJECT NAME:	Br Hmerica	DATE: _	13-14-73
Mclaren Hart	PROJECT NO.: PREPARED BY:	19 0'X01056 RC Berken	PAGE _	1OF
PROJECT DESCRIPTION	•			
	hilding p	ornarees		
WEATHER CONDITION	S: <u>Sunny</u> Ce ~40°	ei, windy		
	11 , + +			
SITE CONDITIONS:	moday bol	dry/n-f		
	stner, J. Kiler	Electric Aprilo St		^
EQUIPMENT IN USE:	Ę (.		•	
CONTRACTOR:back	khne, drillnig,	Frontind loader		
SPECIAL ORDERS /	FIELD CHANGES: _			



PROJECT NAME:	RP America	_ DATE: 12-14-93
	No acia in the	PAGE OF 2
PREPARED BY:	Rc Becken	

ACTIVITIES:
putting on the frain on I down spents and cleaning up the theen
putter on the living on I down must a 2 2
meso,
Ly the source compate along of the that will be considered
the transfer the transfer the transfer of
problem he was having because Johnsons exoper are trying to glace
when at the same time I told the to call Don freedmen who in two
should contact Demas Modeling I Epolle Stel.
due tile at the and the wall of one surp layed rebain
dua holes at and of the skill pad for the foundations of the
whiches and quenelly got ready to pour concrete Tomorno.
placed placed my well sopio ful, PWZ docklelled such
and touged. This work was done under Robo diestion. No also acropsed the
good deemned one back has which he trook of site, and scratched
the strong willed in the cut your area for Hoth.
Empire Soil had one drill crew on nite today working in the tre
The fitter than der file wells for the day Total
15 - 100 KT = 107 (m) 1/6/1) - 5-2 UT
Enquire demped coils and PRE drews finally obening up the PPE.
,

114	
Mclarel Hart	7

Mc <u>laren</u> Hart	PROJECT NAME: BP. America. PROJECT NO.: PREPARED BY: 5. K. Icar.	DATE: 12 - 14 - 93 PAGE OF
ACTIVITIES:	hog Soil Samples Sogy in Sheets Site Health & Sofety for Set up Decon Boot u	1254
	Spoke to Johnson form ON PROPERS Cylinder- DRUMS Dumped sato Ro Hd A Has LEI-On	all all
	Some P.P.E. sate Roll a Holes dag for winch to 1- Has water	щ.
	E Has 1359 Rock on bot Not 5' ON'd y by 15	ton. Stopped at 4'2" 30b.



Mclaren Hart	PROJECT NO.:	BP America 0801056 RC Becker	DATE: 12-18 PAGE 1	0-93 OF
PROJECT DESCRIPTIO	N: SVO SY VEW, AI,	ster PZ		
WEATHER CONDITIONS	s: rain, wi	ndey		
SITE CONDITIONS:	muddy			
PERSONNEL ON SITES HART: B Radius, C. Retherford OTHER: N+A, En	B. Delisio, Kof	Baungartner, J. Par pollo Steel, Ferguson	Ko, S. K. Leer, R. Elect., WS Johnson	Becken
EQUIPMENT IN USE:	LEL		•	
CONTRACTOR:dr./	l rig<			
SPECIAL ORDERS / 1	FIELD CHANGES: _			



- 	- ——— [V	JG	
PROJECT NAME:	BP America	DATE:	12-12-93
PROJECT NO.:	0801056		2 OF 2
PREPARED BY:	ReBacker	· · · · · · · · · · · · · · · · · · ·	

ACTIVITIES:
WS Johnson someof the skill pade total
On the building Farguson thethis continued
development of PWI and dumped soils. The gite was als
and everyone left by 1636.

11-11	
MCIaren Hart)

Mc <u>laren</u> Hart	PROJECT NAME: BP America PROJECT NO.: PREPARED BY: J Kilcen	OATE:OF
ACTIVITIES: MON	day - Acsisted documentation	Simpling & Exposure
	Same - 23 Above	
wes.	Become Aware that Dow Bigle be in - Arrivel 530 Am to p	y was Sick and would
Activities -	- JUN Shears	Repape for the days
	2) Tzilgate Safety meetings	
	O) Copies of Some to Logs	
	4) Coliberte Huu's & Cles 5) Log Colsportion	N
	6) Log Samples -	
	7) PREPIRE Las Document Ext.	ing = (Fritz)
	Site Sunvey (sofaty	11.54 (1-12.52)
	9) Hot work Perenits	
	b) Log H.WP's	
	D Log Direct Air Resolves In	Lo
	A) Pich up New Soil Jamples A) Time	
	b) wirm	
	e) Test	
	1) Sonte	
	D Los safo.	
	Dispose of Decon Hou-	
- 14	Loge Disposit of D' Had	
Szene for Thus	& Enily	
	2 1010 327	

MA	
Mclarer Hart	7

PROJECT NAME: BP America DATE: 12-8-93

PROJECT NO.: 09 080 10 56 PAGE 1 OF 2 PREPARED BY: Rc Becken PROJECT DESCRIPTION: __SVE System AI. PZ +VE:W wells hulding progress WEATHER CONDITIONS: windy sunny, cool SITE CONDITIONS: __muddy______ PERSONNEL ON SITE: HART: C. Retherford, K. Buumgardner, J. Kilcer, B. Dalisia R. Beiken, M. Plantz By B Radus OTHER: H+A, WS Johnson, Empire Soils, Apollo Steel, Forguson Electric EQUIPMENT IN USE: HART: HNU LEL CONTRACTOR: drill rigs SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME:	BP America	DATE: 12-9-93
PROJECT NO .:	090801056	PAGE 2 OF 2
PREPARED BY:	RC Becker	UF

ACTIVITIES:
Empire Soils drilled wells in the south area the two was
completing seven wells. Tom from Empire started development
of PW purising \$ 500 called the the started development
Apollo Stell finder a to the
Apollo Steel finished witalling the noof verto, al guttero also cleared up their work area somewhat.
WS Johnson pour l'acti et l'al
tall early townson the will be to the raised
Tank pauls tomorrow they and plan to do the cumps.
Terauson Electric laid more conduit which will be in the floor
concrete, also moved the temporary service from the pole to the
Had a M (4 valety a let)
Had a M/H safety audit conducted by Jim Loss, problem mens were
dill rigo and overhead gover lines propose tracks for temporary heat
(glacement and try of methods) a neetylene tank and oxygen tank
true off together (must be separated) and exposed overhead light
in safety / strage trailer. I'm said he thought it was a very good
felt gets at 1830.
14: 400 ex 7830,
H+A ++00 C
H+R still using Corrore to Pocate under ground utilities, then also had to use our HNU when it was possible as these was inspecable.
med to use our ANU when it was possible as these was insperable.
· · · · · · · · · · · · · · · · · · ·

111-4
Mclaren Hart

Mc <u>laren</u> Hart	PROJECT NO .:	RP America 09.0801056 RC Becken	DATE:	12-08-93 1 of 2
PROJECT DESCRIPTIO	AI, UEL	ystem J+PZ wells progress		
WEATHER CONDITION	S: Sunny	(Narm		
SITE CONDITIONS:	muddy			
	rd K. Baunga	der B. Delisio; som Electric, Apol		Berken



PROJECT NAME:	BP America	DATE:	12-8-93
PROJECT NO .:	0801056		
PREPARED BY:	Rc Becken		

ACTIVITIES:
Apollo Stal personnel dinished the west + north walks put temporary alosures even the overhead doors and started installing the roof wents.
temporary closures even the overhead doors and started into
the very wents.
- Empire Soils had two drilling crews on pite Tool The
worked on the south side or the silters building Cat the end of
worked on the south side of the filters building. Cet the end of the day they had completed to wells.
At 1145 Sue Boyle informed me that while looking for
underground utilities they had found a gas line al suptimed it.
I went sight back to the new building and asked the iron workers
and electrician to take an early hunder which they were getting
ready to do any ways, I offered them our trails to get the
in which then took are up on. The diller where setting reading to break
for level also. After lineh of sheeked with Sue about what was
going on and she said then that they weren't ours it was -
natural gas line theyre HNV west wasn't picking up anothering it
- pare her one of our LELS to use. Oo it turned out they was to
the out natural gas and one netrogen and the netwood
lake at this point and with this information of told to super
they could all return to work
Feranson Electric is lawn conduit in the 1. 121
Talked to Sue Boyle about Don Bigley weidert.
Lest site at 1780:

plantic sheet covers

plantic sheet covers

called Do at httl 0925 no ensure

called Do at httl 0925 no ensure

Do called Do at httl 0925 no ensure

the first fing on his count went that

The first then int call Tree in Pitthwigh

(Med Tille to part her, suggested before

site will find on site (the good

let him in) I allowed him to heak

his brailer for only personal items

he owed me 3 days perdien . I allowed of him at 1545 his line was body. then followed me to the office trailer hum to stay bought but he didn't elarge calls to the room or buy from and the listel (make some he doesn't Brien world me to call Nicegara Supply I owed him for one trip up here 76-16, then take it back home and wail it then we settled up with perduin, pet per diem for today. allowed her to fax it to his office, of which there was none. He him leave his long book here nother - where I signed his time sheet to Julia. In I treal to get ahold Spoke to Brown - Julie at 1530

114
Mclaren Hart

 PROJECT NAME:
 BP America
 DATE:
 12-7-93

 PROJECT NO.:
 09 0801056
 PAGE
 1 of 2
 PREPARED BY: RC Becken PROJECT DESCRIPTION: 5VE System AL, PZ, VEW wells building progress WEATHER CONDITIONS: overcast, cool SITE CONDITIONS: _______ PERSONNEL ON SITE: HART: C. Retherford, Do Bigley K. Baungartner, B. Dolisio, J. Kelcer, R. Reckin OTHER: H+A, Empire Soils, Apollo Steel, ACI. EQUIPMENT IN USE: HART: LEL, KNU CONTRACTOR: D-3 Dozer, backhoe, drill rigs SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME:	BP America	DATE: _/2-8-93
PROJECT NO .:	0801056	
PREPARED BY:	Rc Becken	PAGE OF

ACTIVITIES: _ Fipcile Steel in site at 0700 They completed the east + south they caid site they were unable to that the next end of the day Cerrone smaped Empire Soils developed PW-2 today and also durped gold dumo I dulled three wells - Left sets at

	12.7-93.	Field Report.
	Apollo Covers South &	J. Kilcan
	Supervising, Sampling Di of Filter 1816g - Portion	rilling on South Side
	Cerrone. Fills Lake C	er Pone
	Fergusa ou Site	
0		

•	111
٨	ıc <u>ıaren</u> Hart

 PROJECT NAME:
 BP America
 DATE:
 12-6-93

 PROJECT NO.:
 09 08 0/056
 PAGE
 1 of 2
 PREPARED BY: RC Becken PROJECT DESCRIPTION: SUE System

AL VEW and PZ wells hulding progress SITE CONDITIONS: <u>Medded</u> wet PERSONNEL ON SITE: HART: K. Boumgardner, C. Retherford, D. Bialey, B. Delisio, R. Becken, J. Kilcer OTHER: NOTA, Ferguson, Appollo Steel, Empire Soil EQUIPMENT IN USE: HART: NNU LEL . CONTRACTOR: drill rigs (2) SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME:	RP America	DATE: 12-6-93
PROJECT NO .:	090801056	PAGE 2 OF 2
DOEDADED DV.	RC Rocka	OF

ACTIVITIES: Arrived on site at 0715 had netter with HAR and
1)EC at 6906. Miscussof granduster plan on 1th and 12-
the well logo or a computer in the
can deat selling that indermetion a lettle sait a true in it
all it once. Acolly Stock award at 07m - 1
but then were having destrouble blowing their GFI because of water
1302 241 600 10 7730.
Fingers Soil drilled to wells on the south side of the the felters builded
were development with us success. This is the second do his line
their to do this talk about poor equipment.
We saw remained two bids for the groundwater well hook up and
retrup 52,000 + 61,000 almost twee the amount in the quote.
Talked to George Marklein of the Apollo Stoal about scheduling between
Christman and New Years, he assumed that they could work right there
he was told Christian Ene 12-24-, 12-27, and 1-3 one all M/H holidan
and we would not be here. He was going to talk to his subcontractors and
get book to me which he didn't . Reft wito at 1630
1

Field Report 12-6-93 J. Kilcan Apollo Installing Siding on South & East Sides of Bldg Therehes Full of water as well as Sumps-Ceprone Takes Rullen off Site DRILLING ON South Side of Filtens Bldg
Rein @ 0/ 2 Stoppel Drilling et 3:30 Full Drums



PROJECT NAME: BP AMERICA DATE: 12-3-13 PROJECT NO.: USU 1056

PREPARED BY: RC Briken

PAGE 2 OF 3

ACTIVITIES: Acrusal on site at 0700, Apolle Stal gersonal annel opper
the me motion relies to the state of the sea to the
total the men on out total to law in sulition in it
the the not charling be should not about half of the your at I the
more all a pretty book rate to make Soil has the distance
and a surelogic around water wells of 1230 1. 1. 1. 1.
and application because of the stable and state)
for some the well, we would not allow him to use it is
to get a hold on the this oscice for quidance with no cueses.
the net a hold on the this ossice for quidames with no cueses.
$\mathcal{L}_{\mathcal{L}}}}}}}}}}$
I met with Sus Arries of N+A to some to some and of answerent about site problems si letters, some change of any and it si
was the has the culturate to the trust
some works that to us. We come to an entered to at
the main several was the sino of the sino which I have to
the state of state of the state of the state of
The second of th
- state of the world have to part it is not to be the time
The state of the s
sure the world we would work in the and in
Tom from ESI never was able to elevelope his well become on the
sketural and problem, he fensied the dem proken up and dumpine
_drums.
ESI did & weller todan.
Apolle completed the as roof todays

Field Report

J. Kilcer 12-2-23 0 Thursday Apollo on Site: A) Place Remainden at Roof TRusses B) Place Puplons C) Install Tse Rods D) Install Subfacien Pieces (ENd of Punlius) E) CRZIN Leaves Cerrone completes Remaining Fine grading & forming For Fon interior block wells Wayne Zimmerman brings Hilti bolts for aljusting West building well- Not Enstalled Must be discussed Further up. (Pen-Beien) 0 Discussed on going building progress with A&H.

(sue) (A+ her request) Helpel Christene install fence posts along Roal on West' Side - Attachel Rope & Cantson Tape -Pickel up wood From BFI. bow dumpsten of brought Apollo subjectes Root will go on temorrow weather



PROJECT NAME: BP America DATE: 12-1-93
PROJECT NO.: 040801056 PAGE 2 OF 2
PREPARED BY: RC Becken

ACTIVITIES: Arrived on site at 0715, the truck with the building was already waiter at the gate. ACT owned a short time site he couldn't make the on the road ato the buildi screped up some atore from the road and felled in the to drive over . Empire Soils crew annel on site at 8820 by the end of the day then low wells, three in the west area on Est crew same on site to take one of their track rigo for the then under so circumstances will the my leave before being Iron workers arrived on site at 0815 has I this site specific unloading the steel from the tracker erection of the steel work. the and of the day their placed four of the five trusses with the horizontal brain of returning botts in the south wall is where sport they need to be moved app. 6" but this Then down us or ust. Sunch with Brian Radus to air some of our greatures this will be done again tomorrow with We had Empire Soils to some to the sails The store backfill surrounding the foundation the operator above its like concrete. 1230,

	12-1-93	Freld Report
0	wed.	J. Kilcen
	Frozen meterial - Ma Comportion 76% (xler Jest. There is about 4-6" echive not working preparely - Low 16%) 2.6% mosstane- Material lould be 90%-
	z) Building Arnives A	ssembly begins
		for Road Enterace Screped off ps used from Corpone's Pile
0	4) Bldg wells up.	- ENL Refters up.
	5) Both Well mid Bolts Need to be	lle Posts (2) bolts 6"out of Line ReSat.
	C) Fine grade (flux Foundation started	completel- Block well
0		·



PROJECT NAME:	BP America	DATE: _1/-30.93
PROJECT NO .:	090801056	PAGE 2 OF 2
PREDICES SV	3031	

ACTIVITIES: Answerd on site 0700, subcontinution objected arming appr.
LOW COLUMN COLOR C
the well we placed worked their as much
section is the building - US Johnson personnel worked or Amerita
the said the past area, concrete well not be some
receiving is up which is due to start tomorrow. Fireway Thetie I it I
as the foundation wall and breen and with
med colornoon. If guestion was raked by voe as to colother the made it
in the tree was proper for well to the 1/00/1
at a free didn't bear and break didn't know as I all a
and the ment of the master was no it didn't mood to be in the the
al yearson and asked him and he and me also Creams
the state of the state of the state of the
the for lette of ecrusied street and
the one for left a Die Bruke and I had a mitte
in the morning with freed & Keet of Motuallier about alocament of the exist
control & his places the all the feet at the of the
the feet best to the west wall I also said we would be more
grand water water with he in our wan he had no another it
that. Felt site at 1730.

Field Roport J. Kilcen 11-30-93 Tuesday 1) Ferguson has holes drilled through wall, Conduit

Laid through wall & stubbed up 2) TREACH PERTIONY Backfilled - 6" below pipe - 6" Above
Compactal, 6" stone Compactel Final 6" placel & (Note) only 10' Completed to Finz (gpzle 3) Johnson - Concrete - Stepted work without hot woield pennit. Stanted work without Extingusshen. Shut down Job until Extinguisher on Site operator Returned with Checkel of tested Extinguishin. 4) Notitied DON- Re Berrier around Flooded Sumps -5) Sue (HGA) wested Troylen Report on backfill meterial (2) Also wented into Re brokkill of TRench & Compaction PRoceelune Joseph Lo Rock Re Conduit Planit (building) on Inspection Prior to Bockfill Soil None was Required per Ferguson Electric.

114	
Mclarer Hart	

PROJECT NAME: BP America DATE: 11-29-93

MCIACED PROJECT NO.: 040801056 PREPARED BY: Recken	PAGE 1 OF
PROJECT DESCRIPTION: SVE System AT NEW and PZ wells building progress	
WEATHER CONDITIONS: cold, snow no accululation	
SITE CONDITIONS: muddy wet	
PERSONNEL ON SITE: HART: C. Retherford, K. Baumgartner, D. Bigley, B. Delosio OTHER: N+A, ACI, WS Johnson, Ferguson Electric.	, J. Kilcer, R. Becken
EQUIPMENT IN USE: HART: LEL, HNU CONTRACTOR: backhise, dozers, track hoe, compactor	•
SPECIAL ORDERS / FIELD CHANGES:	



PROJECT NAME:	BP America	DATE: 11-29-93
PROJECT NO .:	090801056	PAGE _2_ OF 2
PREPARED BY	Rc Rocke	TAGEUF

ACTIVITIES: Arrived on site at 0700, BCT, WS Johnson Empire Soils
and Forguson Electric arrived afterwards.
Todaya artistica mere as la Donna En 2010
Todays activities were as follows: Empire Soil had one new on site
today, they arrived at 950 due to snow storm earth of Briffalo, by the
The of the hear hark well. No said set I was distance
US Johnson placed skid beams for skid pad and concrete reinforcement reban
pointed water from hole dug for tergison alectric much and
of the somety. This done by terrone was trench due made full a
TO ELECTICIAL CONDUIT 6" DE Soud placed in the bottom to make to 11
contest. Small triangistar shaped area north of the in 0 to the
The special special state of the superior of the special state of the superior
the test area was placed into the rolloft box supplied by who it is
there
terguson thetric was having trouble burns holes in the first to
The the writing. Actually there was one non how tengues to do the
The purper engine to the to
10 th of the state of the s
descused accomplished to be let und
descussed accomplishments for last week wells duland backfilling restone on fountation
and grading work. Upcoming exsitu cell placement and construction (H+A made a
comment as to the 2x2x4 concrete blocks needing a field modification, I talked
to Brian about this and he didn't agree) blocks will be arriving tomorrow and
Also discussed was the filter build to the I the animal tomorrow and
Also discussed was the filters building tranching H+H needs a written work plan
for that. H+A words a field mod end apec- for flowable grout in place If best fill. Empire Soil was to fave a crew or site to develope the groundwal wells but they were a greater a crew or site to develope the groundwal
to the first to the medasternoon he said he would get back to me
I had a similar to world be able to send a guy;
when I got achold of him midafternoon he said he would get back to me to tomorrow as to when he would be able to send a guy: L'eff site at 1730; Bob and Christine were attell here working on procurement.
· · -

Field Report. J. KilcER 11-29-93 Monday -1-Rum Wayne Zimmerman Building will rerive on Wed. will have Equipment to unlock. Frame will be completed by FRi. Belence of Bldg (wells-Insulation) by following week (Note) High winds will hinden and/on step work. Skul Peb Redy being brepared - Steelberms
and one Layer of Reban in Place Ditch dug for Power Lines - 4-6" Send on bottom 0 Discussion with H&A Re: Intrusive Permit Compretion test for Brackfil TROXIER test done ON ORigions
back fill-Referred them to Rick. Son detrils

Mul graded along ditch & Road Near Tri Coffice) P.VC. Pipe & Plestic disposed of to BFI Roll off. by Ceprone Discussion with Boby Doug Re Skid beam-ON Skil Pod. Deciled to # Notah beam to Allow st to Et fit into well - Difference due to Droping beson 6" & not Allowing the difference in wall Form -



PROJECT NAME:	BP America	DATE:	<u>11-24-93</u>
PROJECT NO .:			2 OF 2
PREPARED BY:	Rc Becker		

ACTIVITIES: Arrived in site at 0655 subs began arriving by 1780,
tayour soils had we crews working they did it wells total in the
west area. The fifth man did waintenace on the compret, all of the creat
meater left the site by apple 1330, as drown were dunged because of weather
conditions. Al I comported the south west area book felled mound the
foundation, backfilled lake Cerrore Tring to ruse the elevation and quesent
a small owale leading to the inlet fine. ACT also due out the foundation
on the north east wall for installation of the under grown I aleatural utilities
all Milaren Hart employees left for devol to Pittsburg's by 1400, I staged
on site until 1600 to observe ACT activities until them.

Mc <u>larer</u> Hart	

	PROJECT NAME:	ot America	DATE:	11-23-93
A ACIDEOD	PROJECT NO .:	0801056	PAGE	1 OF 2
MC <u>laren</u> Hart	PREPARED BY:	Rc Becken		
Harc				
	<i>C.C. C</i>	/		
PROJECT DESCRIPTIO				
		+ PZ wells		
•	grading	- 	·	
	building w	ork		
WEATHER CONDITION				
- HEATHER CONDITION	<u></u>	5.7.5(-)	<u> </u>	
	· 		 	· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	<u> </u>			·
SITE CONDITIONS:	dring out			·
			· · · · · · · · · · · · · · · · · · ·	
				
			<u> </u>	
PERSONNEL ON SITE	<u>.</u>			
		d, D. Bigley, B. I	Delisio. R. Becken	. B. Rudus
				
OTHER: N+A . E	woire Soil AC-	T		
Oman	<u> </u>	-		
	· 			
			············ <u>·</u> ··	·
EQUIPMENT IN USE:				
HART: LEL, HN	<i>U</i>		•	
				
CONTRACTOR: 225	7 D3 D6 6	ackhoe, compactor		
		······································	 	
SPECIAL ORDERS /	FIELD CHANGES:			
,			 	
	· · · · · · · · · · · · · · · · · · ·	· · ·		
				<u></u>
		<u> </u>		
} ———				
	· · · · · · · · · · · · · · · · · · ·	.		
		•	**************************************	·



PROJECT NAME:	BP America	DATE: 11-23-93	
PROJECT NO.:	0801056	PAGE OF2_	
PREPARED BY:	Ri Berken		

ACTIVITIES: Arrive D on site 0700 WS Johnson one on site ocon there
was nothing they could do and last. ACT bought in the Cat 225 warin
with and sperator to work on the east drawings ditch. Using the 225
the operation recorped the debus and cattered off the dital area them
transported some dry class from the new building area rising the
shout and loader then placed and touged the clay with the 225. This
didn't work because to it was so wet in the ditch one that there was
no base we had him take the 225 dud dig out apper I fort of alono
material in the ditch to get down to a fumer base-then using clay
from the new hulding over se be rebuilt the ditch and sike after
which he compacted most of the ditch with the exception of one
small area hear the intersection of the gas his which he didn't
reach a solice have for fear of hit The gas live.
- Perrone backfilled around the inside of the foundation with creater
store (22 crusher un) in one foot lette dual compacted using a jungoing
jack - Also done yesterday was the and was snaped from take
Conone and oppor one half of it was backfilled with du clay from
the new building onea and compacted to sent it. The onea of the new
building where the skind pads will be placed was rolled and builed in
preparation of forming and rebus tomorrow.
Misson Piper was on site briefly to install water pipe vises through
Fragine Soils had two crews or site of Arilling, they dulled 9 wells
today in the west area. Left sets st 1800

Field Report 11-23-93 J. Kilcen Cerrone Arrives with crt250 Hor - Plus Operator -To dig ditch Along Road. Steve Beatly on Site to Install water pope Rosen on west Directed V. Cennowe Re Composton & Fill placement Hong WILL- He & They are working out well. He is using 12" Lifts on Loss as Requested Plus 4 Passes with Jumping Jack. Materials Feel very Compact Dozen (P3) & openation Scrape mud from Lake Cerinare Replace with Dry material 12 may - Fill was Rolled &
Sorled - Remainder will be Finished Later. 10:50 - 11:15 Pump water from Insite Trench to outside Skid Pels are up to scale on west side of Bldg in Prep for Rebin, Forms, C.C. Etc

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MCIE	ren
Hai	E

Mc <u>laren</u> Hart	PROJECT NO .:	BP America 090801056 RC Becken		1 OF 2
PROJECT DESCRIPTIO	N: SUE Su AI, VE	jetem U+PZ wells work		
WEATHER CONDITION	S: <u>mie, su</u>	ny we windy a	45°	
SITE CONDITIONS:	dring out nice	2 ly		
PERSONNEL ON SITE HART: C. Retherfor	d, K. Boungart	men, D. Biglay, B.	Dolivia R. Bec	ko-
EQUIPMENT IN USE: HART: HOU LEE CONTRACTOR: dul			•	
SPECIAL ORDERS / 1	FIELD CHANGES: _			



PROJECT NAME: BP America DATE: 11-22-93
PROJECT NO.: 090801056 PAGE 2 OF 2
PREPARED BY: RC Becken

ACTIVITIES:
Bob Delisio and supelly Discuss O - meeting with Marty Dozen, Sue Boyce
Bob Delisis and supelf. Discussed progress in the filters building is dieling
trench + pipe work, the read for a quick decision about the exciter cell tell to
Jake of NXA about about what they are doing about groundwater wells presently.
Marty would like to know when var groundwater wells will be
ready to see the du to Co: 4
nearly for operation by the Christman which is preffered by the DEC. No
one from WS Johnson was on gite today, ACT had 2 new here working on the
finding renowing the poorly placed backfill and getting ready to refield with analos stone. They also pumped the water out of Lake Cereme
into the carried stone of language the water out of Lake Cerune
here today they sport thee day dunging soils deconning theyre equippet, teeing down them deem pad, no drilling was done today.
News down them deen pad, no drilling was done today.

0-11-22-93 Mor.	dzy	Field Ropont J. Kilcen
1 Cerrone Sterrs diggi	vg Follmaterial	- 11
2 Water is Running in	urden well on	west side (Documented By Hot
3 Bab directed Leke (
_		11 Am Pumping to derin -
		150 ft3 x 7gul/ft2 = 1050 gol
y) Rick Johnson - On	^	
Guestions	: Will Tenl	K zrees be Compectal for
	Poun?	•
•	A	Pirectal Frankie (census)
a a constant and a co		Pered Today for Tomaron's Pour
(Soil Exceu	stud from Founds	tion & Reffecel- / compreted.
Cerrone Starts Pu	imping Lake at	11. Am Size 60'x 15'x3" Aprix
		- Pump off at 11:45 out
of Gas. Restro	ated at 12:30	off-at 2:12 Pm
7 Discussed Beck Fi	Il priceodures w	th Rick B. b& Brizn -
Back Fill will be	in 12" Litts C	comprofed with Jumping Jeck -
No Traxlar will be	Required - Pen-	-BRIEN
8) Spoke to Way	le Zimmerman 1	REINSUlzten fon C.C ivall
Szid Johnson	Corpt. would	Hendle.
Discussed with	Zimme emze L.	rck of Compreton round
		Zimmeriman Discussed with
		Excluste to 4 out & down
35 Tauk Pad	, ,	

	Soil Removal Description
	A) West well inside wet - water Infiltration from outside
	& Insile
	B) South well inside Relatively day Cluddy
	(d) Ezstwell " Wet Plestic
	(d) Ezstwell " Wet Plestic D North well Pertiel - " "
	Called office Re water from Decon at Drillers
• • • • • • • • • • • • • • • • • • • •	Site Flowing out of zrea
	3 Lords of FIII stone / CORROR TRUCK
<u> </u>	RICK Johnson - Will Not schedule People For tomorron as
	ANY FORM WORK Will interferen with CORRORE & Brokfills
	Will Play wed by Ezz.
	,
, <u></u>	

114	
Mclaren Hart)

Mclaren Hart	PROJECT NO .:	BP America 09 0881056 RC Recken		
PROJECT DESCRIPTION		fem EW ding work		
WEATHER CONDITIONS	: windy, col	ld		
SITE CONDITIONS: _q	pod			
PERSONNEL ON SITE: HART: D. Riglay, OTHER: H+A, Emp	K. Barngartre	T. R. Becken		
EQUIPMENT IN USE:	=		•	
CONTRACTOR: dri()	rigs (2)			
SPECIAL ORDERS / F	TELD CHANGES: _			



PROJECT NAME:	BP AMBRICA	DATE:	_11-21-93
PROJECT NO .:	090801086		2 OF 2
PREPARED BY	Rc Rocke		

ACTIVITIES: Arrived on site on 0700 drillers arrived shortly there after Kivin al his over worked on the east end of the filters buildly rugself and my over worked on the west end at VEW 35 and At 68.
We had problems with VEW 35 little rock we had to nove three times not finishing it until 1430. Started AT 68 we considered and finished it in apper 40 minutes. Keven and his crew finished 6 holes in
building IPZ 87 at 1530 using the Bobcat rig. While two guys worked on that hole the rest of the crew started along the building the building the live guys worked
the clean up and got Sua Boyles approval a left site by 2030.

11-20-93 Field Rapont. J. KilcER Power went off at 9 Am due to 14sqh Voltage Grounding at Yead light Neza Storage TRI. M/H (Bob) Supervisor wents to continue to operate drilling Equipment USING FORKLift & Bob Cet Lights. Truck drill continues to operate due to preximity of open overhead door. Light Adequate Youer went of zgain at apreny 1:30 Pm Same Problem - Light (year) Power Line is grounding ON 14,000 Volt high line throwing main ciruit Breezken at Plant Sub Station. Bob wants to continue to work under Equipment hight-HGA Rep (Dzn?) Has Reservations - As DREIL Rig is being movel - I concar then Suggest we Shut down - No work. Toomeny shedows - Drill Rig Boon to Neza Well - Tripg Fell -Hazzeds - Every one Leaves Anea to Await Repairs to Lighting ARound 700 Pm Bob Suggosted that IF I want to go Home I can- I stated I believe I am Required to be Here- And Remained until 9.15 Pm. Hazzels- working at night-De highting around offices Trip & Fall - High Potential at gree Steirs. 2) No highting SN yeard from Blog to offscos-While trea Lights may help- Going From Lighted exea

of work bldg - outside Takes Time for Exesto 2 djust - Besically I welked 34 of way tolk oft. and Could not see very well to at All Notes & Suggestions - ON Up comming Trenching -1- Water was ENCountered on the upper heads of some bone Holes - What plan is there for any volume of water on the Trench (contaminated focused, stored) 2) Contractor for Ditch. A) How many People? B) Are they Respirator fit Tested. c) Is there a plan to up ando to have (B) (A) SCBA' (B) Cascala / Air Line system (C) Back up Personnel (Resour) (D) Rotational Personel The above is Lon & During Exerust son - Pipe Laying Testing Beck filling Etc. Some borings Indicate there is a strong Possibility Level Be will have to be used This is compounded by the Feet that the size of the ditch will allow Release of greaten Volumes of Volitiles -(3) What size is Equipment to be wased for EXC OUZTION-A) Turning Redius-B) Disposition of spoils-c) overhead wires

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Mc <u>laren</u> Hart

Mclaren Hart	PROJECT NAME: PROJECT NO.: PREPARED BY:	BP America 09 0801056 RC Becken	DATE: <u>il-19-73</u> PAGE <u>1</u> OF	2
PROJECT DESCRIPTIO	AI PZ,	System VEW welk work work		
WEATHER CONDITION				
SITE CONDITIONS:	drying out			
PERSONNEL ON SITE HART: K. Baumgard T. & Panko, R. OTHER: H+A, W.	ner, C. Retherfor Becken		aus , B. Delisio, J. Kılcer	
EQUIPMENT IN USE:	`C		•	
CONTRACTOR: D-3,	D-6, Trackhoe	, Backhoe, Roller		
SPECIAL ORDERS /	FIELD CHANGES:			



		•		
PROJECT NAME:	BP America	DATE:	11-19-93	
PROJECT NO .:	09 0801056	PAGE	2 of 2	
PREDARED DV				

ACTIVITIES: 10 looked two shifts today. I arrived on site at appr. 1100
talked to Brian about concerns I have with costs or what in the
bid, ei Keven + Christines time, grading work, ota Iby changes, Not wite finted
1400 talked to Greg Reterson Bot and Brian. at 1515 we started moving
equipment into the filters building and coving holes. at 1720 we retuille
started drilling with two rigs (one truck mounted and one trailer mounted) it
takes forever for these mys to cetup. The truck mig was moving along really
good until \$2354 when the electricity went out. See Boyle of H+ A called
Miagara Mokaok and they said they would be out to check and fix the grobles
but they couldn't say how long it would be before they arrived, so I sent
the graw home. Before the lights went out we had done 4 wells with the
truck sig and I will with the trouber sig.
· · · · · · · · · · · · · · · · · · ·
Also in the morning of called Engine Concrete, Mr. Walt Toddens about pouring concrete floor this time of the year. He said he would recommend the following: I torp the subgrade several days in advance of pouring to warm the subsurface.
pouring concrete floor this time of the year. He said he would recommend
the following. I tarp the subgrade several days in advance of soming
to warm the subsurface.
2.1 heat the concrete mix
3.1 use a fast set min.
4) reterp after youring and heat for seven days Then downles cool the pad,
first turn of the heat them a day or two later uncover.
I reterp after youring and heat for owen days them showly cool the good, first turn off the heat them a day or two later uncover.

11-19-93. Field Report GRELING ON West side of Plant zling Roal Completel Silt Fence installed in places Parking Lot/ Razd way washed down Appen 70% Due to Tim Note-Water Pumped prion to West Bank grading Googal Pumpel for Aprex 234 hr. Note- most water Recirculated Souto Culvert & Back to Pump. Drive way & Road way Seraped Discussed Concrete Pour with Doug-He decided to make Adtl. Forms than to pour due to: 1- Weathen 2 Pad to be pound was in area that hasto be Re Exerusted. & Compactel Skil Ped Excepted and Pent of west well Footing. 1580' Footing was Follow with 1 Sty Steve mix - & Exceveted Skid Ped erea has 6" Stone To be Compected ON Monday Viscussed with Doug- Re Winch Setting-He will Bare 24" hole & Pour 4-6"CC uplese of 6 "Compactal Stone Fill -

Mclaren Hart	PROJECT NAME: PROJECT NO.:	FIELD ACTIVITY LOG BP America 690801056 RC Becker	_ PAGE1 OF 2
	AJ PZ i builden w grading	ster IEW wells	
SITE CONDITIONS:			·
B. Radis	dner, C. Rethor		. P. Becken, & Kilcer,
EQUIPMENT IN USE: HART: Iranlers,	LEL, HNU	25, front and loader back	thre dozers
SPECIAL ORDERS			
	· · · · · · · · · · · · · · · · · · ·		

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PROJECT NAME:	RP America	DATE:	11-18-93
PROJECT NO .:	09 080 1056	PAGE	_ 2 OF Z
20524552	ac Bules		

ACTIVITIES: Armed on site at 0700 ACT as 1. the almost the
ACTIVITIES: Arrived on site at 0700, ACT grading the south
will of the building and cutting a new ditate, WS Johns working
on the foundation forming north wall west and they should be porring
concrete this afternoon, Doug Jonesse from W5 Johnson augcested that we have
the building exected before the floor pado are poured because of the weather he
needs 36 hours of above freezing weather with no percentation (this is information
he doesn't want anyone to know he suggested). ACT's Cat 225 armed
at 0910 they used it on the fullder (contract work) for apper one hour
Then started working on the grading on the west ditch in he stated on
the south and and worked northward tring the too edge and ali
the with end and worked northward trimes the top edge and placing some material in the ditch to raise the felling of the ditch.
Engine Concrete arrived at 1500 and poured the west end of the north
of the face of the
wall and the base of each sung. We (Bob; for and myself) took a
slump test and it was 3". Concrete comples were taken of todays pour
and ESI picked up roves that had been poured the last few days.
Sue Boyle of 16+A asked me what we would be doing with the west
road it is fretty muddy about the only thing we could do is wash
it down, Cerrore has a water truck but I will talk to Fred tomorrow
to see if we could book up to the hydrant on the west end of the building
and we've that . Brain Raduo anwell on site at app. 1030 and will
be here today and tomorrow.
Empire Soils arrived late today as mentional yesterday the one crew
lad to wait to pick up a part needed for the their me and they other
the was to fick of a for meeter for the the ma and the other
today all is the west are the sure to
today set in the west area on the pavement.

J. Kilcer Thursday 11-18-93 Field Report Discussed Piping with Plumbon & Chartene -Directel cerrone to Dig for Plumber D69 D3 GRIDING ones South of Folter Bldg. At. 9:00 950 est Loads bring stone in for Pal & for Plumber's Hole-DC is Shot Lown at 8:25 openator Transferred to other Case for Plumben work. Discussed with Rick. the time schedule for Floor Daug Neels 36 hrs et 40° Temp - for a Satosfactory Pour 9.15 Cerrine's =225 ext Hoe Annives works to 11:00 Placing stone in Foundation and overwall for Concrete Pour_ 9:25 - D3 GREDING Next to Filten Bldg upset 2 Pallets of Capborbum Products - Notifiel Corner (VIVE Re- Same - Need to Stay Away 3-41ft. Fon Sofat 10.00 John Fenguson & Crew Arrive to String Caple For Power to Tri at Bldg. Site 11.00 COPPENE 225 Strats ditch grading on west Side Discussion with Bob D. - Vi Connone Re ditch Shape Neel to Fill 1-1/2 ft They Agreed - work Continued AFten Lunch to 3 Pm. when Equipment had to be Cleaned. 1:30 Set C2+ Lorden to SCRopee Road - 15 min Job. then to Court years to Romane Pile of dist

Dort Remark & Aren apodel by 03 Loter Composed:

Job Stopped 27 3.30 to Clear Egysp. (April)

3.00 Pm. Ceret Apriles for Poor in N. W. W211 &

2 Sump Hours.

3 3 sumples taken & 1 Slump Test. Slump 3/2"

Ferguson Has wire 60 ft from Pole Near Trl.

Spoke to Don. Big. Re Satoty. (1) U. cername

Riding in Locden while it was aparative;

(2) Empire Soils Peple aparative, (Positsoning)

drill Rig from outside Not from Drivens set Sect.

1) Ingaran. Due to Remain Privan Potential

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Mclaren Hart	DAILY PROJECT NAME: PROJECT NO.: PREPARED BY:	<u>09080</u>	1056		11-17-93 1 OF 2
PROJECT DESCRIPTION	N: SVE SY RI, PZ., building		U5		
WEATHER CONDITIONS	s: <u>rain</u> , cool				
SITE CONDITIONS:	set, muddy				
DERSONNEL ON SITE HART: C. Retherford	K. Boumgord			Delosio, I.	Kelcer, R. Becken
EQUIPMENT IN USE: HART: Travlers, 1		· · · · · · · · · · · · · · · · · · ·			
CONTRACTOR: Doz				dull rigs	
SPECIAL ORDERS /	FIELD CHANGES:				

and the second s



PROJECT NAME:	BP America	DATE:	11-17-93	
PROJECT NO .:	090801056	_	2 OF 2	-
DOCDADED DV.	Cl Rocke			

ACTIVITES: WS Johnson view still building foundation forms sol
rebox for sumps pul north wall west and former had a guit at
won because of rain. ACT tring to backfill around in straper and
but goes doing a good job watching him and suggested the backfill
may be to wet. Carrow delivered stone (muchant) for fill inside the
building foundation, some Their he probably should have done long agor.
The building is being built in the lowest spot on the site it will need
a pretty creative drawage design to keep the runors from pooling around
and in the building in future years ACT houling slop (and) given tel
in almost the west ditch over to the south and of the self build!
using a 950 front and boder bleve arested a new by not greding
until now this should have been done weeks ago.
We had a problem with CH+A people telling our puls what to do so I
sat down with Dove of H+A and told him if H+A had any problems with me
subs to talk to me not the subs directly a Also talked to Dave about
A+ h personnel not wearing the proper and the source when entring ET's he
be so stupid to walk up to an operation whill sig and look shown a
be so stupid to walk up to an operation shill sig and look slown a
Alle unpolested but he couldn't move short it.
Bot and of decided to have ACT him is a 225 executor to trum of
the top of the west bakk at cut the made which is app 1:1 now to
a none appropriate grade to allow the cover material to stay in place.
This cut material is high and hopefully dever and might help to colidify
and stop in soon of of the pull a Empire Doels had one drell my that
wouldn't start until almost noon then the other in broke down it won't
he up and region with tomorrow. Between the two rigos they did only \$4 hours as though we can't lay out wells
protes and which is good for M/H seems as though we can't lay out wells
until awas are graded. ACT graded a the court your per Vine it will be
done tomorios an. Reft sets at 1830

ī.	11-17-93 Field Report
	J. Kilcen
a Marie Mari	Cerpentens begin work
	Cerrone moves crushed Stone out of mille areas
,	Cennone Aprisons with 950 Cet Jurden - moves dint
	From ditch on West Side to East of Filter Bldg.
	Cerrene Back Fill N.E Foundation - inside & out.
<u></u>	Hzs Problem with Jumping Joek. Not working Properly
	is using clody - some what day material -
	Suggested He Not use Plastic materials.
	Water in Trench that is being back Filled is being Forced
	To End & Pumped out.
1	
	Discussed with Rick the Chrin of commend with
	A 9 H (Dzvil) Re M/H sub contorzeturs
phonyageage ordered compared to the two c	Result. AGH agreed, Any problems will go through us
	and then to Contractors.
	Masson Contractor questioned bepth of Sumps
	Prin Force Corpentons to Stop et NOON-
	Cerrone discussed grading on building-
	Discussed Skil Pad Losign with Cerevine.
	Ceppone delovered 7 Truck Lords (10 wheelen) of stene mix F.
	Discussed Gradsung with Cereare, Rick & Bub. Agreed to
	Use Trick Hoe - 6' Bucket - D6 Dozen & Lorden
<u>]</u>	Reviewel Field grading & mide suggestions with Bob on Si

7:45 Lay out discussion with Bob and surveyors Ra-Courtyard shaping -Backfill around tank foundation Used Dry Clay material. Suggested to V. Cerrone and mot to put any balls of mud in backfell - Material was plate tamped and Roller temped - in 1 Foot Lifts Itee! Arrived for sumps and for Tracks on shid for graterial was unloaded by hand Causing a safety problem: Bloms wer too large to handle by hand - Should have been unloaded by machie- none was provided or Discussed safety parameters and M/4 potential responsibility Re- the above aperations. Suggest we not permit a reoccurance-Steel being placed in N.W. Trench - Forms being striffed and moved down for find wall Grade states in place for Court yord-find grading-Tractor-Tul. A rriver to delive more steel-Relan, Unlouded by hand - Driver has no hand has



PROJECT NAME: BP America DATE: 11-15-93

PROJECT NO.: 090801056 PAGE 2 OF 2

PREPARED BY: PC Becken

ACTIVITIES: Arrived on site at 0700, Empire Soils not working today.
W5 Johnson working on north wall foundation framing and pouring
concrete this afternoon, ACI pushing mud around the building
degging the dump wells inside the building, placing stone in the
base of the cump wells and comporting it and grading the
7500,00000
Sue said that she would need a drawing or written explanation
of the sump box we propused placing in the north east corner of
the contrard of spoke to Brian about that is we agree that
would only hold as up so we want use a box we will
the building extension.
PPF drums were checked for labeling or marking one I found
one soil drue mixed in the bunch. All the drum were strand
next to the clean wellooff. Left site at 1730.
· · · · · · · · · · · · · · · · · · ·

Field obsequention Raport November 19-1993 J-R Kilcan lasks accomplished this dete-and obsorvetions-1) Sump Holes were Excaustel with Stone placed and bottom & Tromped 2) Some mul was a scraped off and Poled. Spoke to Vsneent Carpene Regarding Remaining wet materials. He indicated it would be Removed Private putting bound Necross

Sub Bread Adth meterial - (Stone) would be brought in as 3) Spoke to Compension Re- Safety glassos being worn- He complained that they would Fogup End could not See - But would were them. Ih. Later he had them off zazin-4) NE section of well is formed & Powed - 3 semples are taken and Set aside. 5- Discussed gazding options in Count yeard with & Delisio -Mersured Building Doon - 12'x 13'6" high for access by Inillons - Insile Height Appears to be 20'to respectively cesting - Crallen drill Rigs appears to be 25 \$20 min with boom on working Position. 7- Count york garded - may need some fill - observed 2 Ruf drains juto Manhole - Both more Hole depth to & of discharge Pipe Appens to be 2h from Top of hit agr. This depth appears to hold possibility of dazining homest ARREAS SN TRansformen Compound 8) Werthen Cloudy, Cooling off windy

Mclaren	PROJECT NAME: BP Americ PROJECT NO.: 090801056 PREPARED BY: RC Becken	DATE: 11-13-93 PAGE 1 OF 2
PROJECT DESCRIPTI	ON: SUE System AI, PZ, VEW wells building work	
WEATHER CONDITIO	NS: clear, windy, nice	
SITE CONDITIONS:	a little wet not bad.	
PERSONNEL ON ST HART: K. Baumo	re: ardner, C. Retherford, D. B	Bigley, B. Radus, B. Delisio, R. Becke
OTHER: HAA.	WS Johnson, ACI, Empire	Soil
EQUIPMENT IN USE	EL	•
	/ FIFI D CHANGES: Change	designation clean/duty soils
	to 20 ppm	

111-1
Mclaren Hart

PROJECT NAME:	BP America	_ DATE:	11-13-93
PROJECT NO .:	090801056	PAGE	2 OF 2
PREPARED BY:	RLB		

ACTIVITIES: Recived on sits at 0700. Empre Soil started work at appr 0800, working on west end of plant in the paved area with your 1600 when they moved into the filter building by 1600 eight wells deal been completed ordside and one well was done in the filter building in the evening W.S. Johnson worked on the foundation frame for the north wall and promed the concrets for the air strapper pad. ACT spinished backfilling and compacting in what were compalle award foundation wallow and shinked moving the soils that had been abortabled to store to the building wall placement. I last site at 1980 the less of the crew
left at 2100
) —————————————————————————————————————

Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: R.C. Becken	DATE:	11-12-93 1 OF 2
PROJECT DESCRIPTION	V: SVE System AI Westls, PZ well Continued building	ls, VEW wells	
WEATHER CONDITIONS	s: cool, windy, rain lest n	ight.	·
SITE CONDITIONS:	vet, muddy	·	
1	rdner, C. Retherford, D. Bio Tohnson, ACI, Nagara Bour		
EQUIPMENT IN USE: HART: HNO LE	Rigs (4), backhoes (2),)orers (2),	
SPECIAL ORDERS /	FIELD CHANGES:		

MCIA!	<u>er</u>
ACTIVITIES:	A·
æ tine	Acī
orginalle	pu
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DAILY FIELD ACTIVITY LOC PROJECT NAME: BP AMERICA PROJECT NO.: 09 080/056 PREPARED BY: RC Becken	G DATE: 11-12-93 PAGE 2 OF 2
wed on site at 0700, suld arriver moving the topsoil away from the up into stakepiles to close to the khilling al taxpung. WS Johnson upper pad al francis the war he sourcete for sin stripper the	building location (to was building) - ACT als: the frame, should

Mclaren Hart	PROJECT NAME:	BP America 09 0801056 RC Becken	OG DATE: 11-11-9 PAGE1 O	i3 F_Z
PROJECT DESCRIPTION	AI : PZ building	ten. , VEW welk ins. trades		
SITE CONDITIONS:	good		D. Biglen, B. Delise	0
EQUIPMENT IN USE:	LEL		•	
dozen		thoe, compactors,	umping jack, vibrator	, D-6

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PROJECT NAME:	BP America	DATE:	11-11-93	
PROJECT NO .:	090801056	PAGE	2 OF 2	
DBEDAGED BY				

ACTIVITIES: Armed on site at 0700 Johnson ACI, and Empire Soils of
arriver about the some thing. I told Vince Scrowne that we would be
taking comportion tests on backfill and he asserted me they would pers
but for some reason his are was digit some of it out a short
time later? The compaction seams to be a bot better today
than yesterday of met with Sue + Dave of H+ about wester tracking
and the paper work They
had asked for I gave them the first work tracket record they were
cooking me to don Duan Dow and myself me (with the
Rpollo Stal - Daorga, Jaranson : Electrica - Bob Johnson - Wayne Rick,
Augura Plumbing - Bob. There was a few questions on floor sumps-
location and pouring procedure they would like to pour the base
separatale from the ofloor and sink walls. They would also like to
know if there is any pitch to the floor to direct water flow.
ASI is backfilling around the foundation and stockpilling the
greviously stock pilent topcoil west of the building of ohion is from
the foundation for the air strepper part. At concrete ward poured tooling.
Empire Soils pecked up one 5 callon pail of backfill material for a compaction
and of the filter building in the powement area. I Bob + I met with
Fred about what had to be moved for the weekend work. Reft site
at 1830.
<u> </u>

Mclaren Hart	PROJECT NAME:	FIELD ACTIVITY RP America 090801056 RC Becken	DATE	: <u>//-/8-93</u> E <u>1</u> OF <u>2</u>
PROJECT DESCRIPTIO	ON: SUE Inst.	allation , PZ wells		
WEATHER CONDITION	IS: Sunny, Co	ol, windy		
SITE CONDITIONS:	good			
1	ardner, C. Ket	therford, D. Bigl		Reyken
OTHER: H+A, E	mpire Soils, ?	Johnson, Act		
· ·	LEL			
CONTRACTOR: De	ill Riga, Bay	khoe,		
SPECIAL ORDERS	/ FIELD CHANGES	S:		

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Englis Front



PROJECT NAME:	BP America	DATE:	11-18)-93
	090801056	PAGE	2	_ OF <u>2</u>
PREPARED BY:	Rc Becken			

ACTIVITIES:
Arraved on site at 0700, Empire Soil new on site 0710, hand
tail gate safety neeting. We only have one dull crew working today
because fred from Metalins hasit moved the naturals out of our
way and rather than running out of work completely I thought
it would be better to put one rig on stand by . The cost of stand by
is 140/hr. is Johnson crew finished building the foundation france
for the west wall and govered the wall in the afternoon - ACT dues the
foundation for the air stripper pad and placed to stone as a place.
ACT also back filled the trench on the south wall, I don't believe
the backfill was compacted but al don't know and as notody from
from MH knows for sure. We need another teahning to do be
out at the building site to watch what going on out there.
Received twenty drews from Greif Bro. for soils management ordered
drew lines for placement in sorts drews. Met with Sue
at 1300 about waste management relan. Empire did six holes
today. Had publim with Don today he spents to much time tolking
and in some cases arguing with Sue + Veve, he was told not
to day any their were than shootetely necessary to them if then
and him something the answers some through Bot or my self, if then
want something from him he is to say el'el get it as soon as I
came. Left site at 1830

Mclaren Hart	PROJECT NAME:	FIELD ACTIVITY LOG BP America 090801056 RC Becken	_ DATE:
PROJECT DESCRIPTI	UE. \ A	I+PZ wells work (foundation)	
WEATHER CONDITIO			a nots
		but still wet and mudde	
1	gartner, C. Rethe Empire Souls, E	orford, J. Panko. D. Bigle Johnson, ACI	y, K. Oecken
EQUIPMENT IN US	LFL		·
SPECIAL ORDERS as follows: 1. from sunface 3. Sample the well to des	I FIELD CHANGE (Sping E+E chan to that prede one soils and to used depth put	etermined level and put to the somple in trailer to they those cuttings in	a separate show and sample
the cuttings	so mention al	propiete volloff bota	

driens will be lived with a drien lines to elemente contamination of the drien

and possible cross contamination.



PREPARED BY: RC Becken

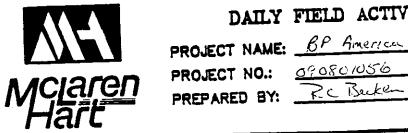
PROJECT NAME: BP America DATE: 11-9-93

PROJECT NO.: 090801056 PAGE 2 0F 2

ACTIVITES: Arrived on site at 0700. Empire Soil personnel started arriver at 0710. WS John personnel service at 0715. to the with foundation wall removed the above having the looter for the north wall. Bob on the Lilter which was to start Tomorow also coulded

Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: 090801056 PREPARED BY: RC Becken	DATE:
PROJECT DESCRIPTION	VEW. AT + PZ wells	
WEATHER CONDITION	NS: _ & sunny, cold, windy 40°-45°	
SITE CONDITIONS:	wet but day starting to dry	
	TE: umgartner, C. Redherford, J. Panko Empire Soils, Johnson, ACI	, D. Bigley, R. Becken
EQUIPMENT IN US	Empire Soils, Johnson, ACI ELL LEL	, D. Bigley, R. Beikon
EQUIPMENT IN US HART: HNU CONTRACTOR:	Empire Soils, Johnson, ACI	•

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During			
	BP America	DATE:	i1-8-93
PROJECT NAME:	0. 1. (6.1)	=	
PROJECT NO .:	090801056	PAGE	2 of 2
FROGEST TO	3 /0		

1 1Cl1 C
ACTIVITIES: Arrived on site 0700, met will bob and Morty Dosler
With a shain of command for the wither and he said he fince of Corrow about grading activities and he southwest corner
Time of Conone about grading continues the southwest corner works on the southwest corner works on the southwest corner
in the court and to level of the stockpile I soil and
personnel worked at the francism of the great enfoundation
personnel worked at the grander was poured. Dave Moretrum- from
The state of the s
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
and I had to agree with her so raises 1 94 apper 1545 Kever
dulling to close up of did it myself to the skare adore on the me
Commonter out his will on the first have a telanger short
of the rolling bokes he that the facital to not one.
in the last & yours no of sent to show up at appl 0815 them
dulled 8 wells for the day . Left the site at 1730.
dillet & were for my my

<u>claren</u> Hart	PROJECT NAME: BP America DATE: 11-7-93 PROJECT NO.: 09 08010560 PREPARED BY: Rc. Backen N: SVE Sustem VEW, Alt PZ wells in the filters building
EATHER CONDITION	S: Show flurnes, cold, windy
ITE CONDITIONS: _	wet, muddy j work area maide filter building good
ERSONNEL ON SITHART: K. Raunt OTHER: H+A	enther, C. Retherford, J. Parks, D. Bigloy, R. Becken Empire Soils
EQUIPMENT IN US	E: , LEC. Drill Rigs (4)
	/ FIELD CHANGES:
SPECIAL ORDERS	

11.

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PROJECT NAME: BP America DATE: 11-7-93
PROJECT NO.: 09 080/056 PAGE 2 OF 2
PREPARED BY: RC Becken

ACTIVITIES: Arrived on site of 0700 Empire personnell animal
at 0700 also. Now tailgate safety next then went to work.
Had problems with large rocks stopping the dill ring and ciality
hight. Shif steer rig worked on me hole from 0730 until almost
1400 and had only your 10 foot and to make mothers worse that
caved in when they gulled the amost out. The crew from the shirl
steer is stopped dulling at that soint and started cleaning up.
The trailer rig want of had one hole completed at 1200 and
finished the second well at 1615.
For the weekend work (Set and Sun) we have manual to complete
eleven wells at follows: 72-70 Pz-71
PZ-72
72-73
)
PZ-74 PZ-76
PZ-76 BAI-72
AI-73 AI-74
y ∈ ω − 36
νεω-37

XYEA	DAILY FIELD ACTIVI		11 6 25
	PROJECT NAME: BP AMERICA PROJECT NO.: 09 080 1056	OA	TE: 11-6-93
мсіагеп	PROJECT NO.: 81 088 1036 PREPARED BY: RC Becken		GE OF
Mc <u>laren</u> Hart	PREPARED BY:		
PROJECT DESCRIPTION	SVE System VEW, AZ + D		
	VEW AL + D	wells in the	e filters building
	<u> </u>	-	
WEATHER CONDITIONS:	snow florries, cold, windy		
SITE CONDITIONS: 4A	et, muddy; work area insi	do filter build	ing good
SIE CONDITIONS: _6	st, proceed ; aso.		(
ERSONNEL ON SITE:		-	<u> </u>
HART: K. Bowmgart	ner, C. Retherford, J. Parki	D- Bigley.	R. Becken
OTHER: H+A . En	upire Soils DEC		
EQUIPMENT IN USE:	<u></u>	•	
CONTRACTOR: Dri	11 Kigs (4)		
SPECIAL ORDERS / F	TELD CHANGES:	<u></u>	

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PROJECT NAME:	BP America	DATE:	11-6-93	
PROJECT NO .:	09 080 1056	PAGE	2 OF 7	
DBEDADED DV	DeBaka			_

ACTIVITIES A
ACTIVITIES: Arrive I on site at 0645, Don Bigley & Kevin Boungartier and Tom Kosperek from Empire Soil already there and getter ready to start boring
Lotes through concrete floor. The rest of the crew M/H arrive at 0700 ml
Empire Soils personnel arrived at 0700-0715. There appears that we will
be having problems with cialing hight in the areas of PZ-70, PZ-11, PZ-72.
At 1530 the spid steer ing had 2 wells done and was exper. & fort
deep on their third well, the trailer is had one towell done and was appro-
12 foot deep on this second well they were have all bends of subleme with
keyways broking. The spil does in is out performing the trailer
in but it is really to light to an as deep as needed Sound
well for trailer sig completed at 1615. The Skill steer via similar
its third well at 1645. The trailer is completed its third well
at 1806 and its faith well at 1930. The ship steen rig furthed
its fouth well at 1950 others seem to be going a little botter now.
Timeshed day with nine wells, left site at alx
· · · · · · · · · · · · · · · · · · ·

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Mclaren Hart	PROJECT NAME: BP America PROJECT NO.: 09 080 1056 PREPARED BY: Rc Bucker	DATE: <u>11-5-93</u> PAGE 1 OF 2
PROJECT DESCRIPTION	N:	
WEATHER CONDITIONS	5: _cool, windy, ram early in morning Temp 37-45°	
SITE CONDITIONS:	wet, muddy	
	ther. B. Radus, C. Retrorbord, J. Pana upire Soils, WS Johnson	ks, D. Bigley, R. Backen
EQUIPMENT IN USE:		•
	Her Rigs, Skid Stoer, Backhoe. FIELD CHANGES: boring soils from ated into 3 groups - cloan, dirty,	inside the filter building

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//	MC <u>laren</u> Hart

PROJECT NAME:	BP America	_ DATE:	11-5-93
PROJECT NO.:			2 OF 2
PREPARED BY:		_	

ACTIVITIES:	
TTo co	en from WS Johnson arised on site at 0715 it was
ings a se D	from 2 new to 3, the new guy had his site suscepie
traine	then left because of the weather The two orginal crew members
stand an	I built footen framing for the west wall. 9 cenent
truck arrive	Dat 1415 to over the forter neutrosed above.
Gengin So	I remained arrived at 0850 we had a depecially love
Tail gate to	check they're respirators. Eight wells were completed
to Day we he	al a problem with vEW16 in which we kept on hitley buried
consiste. Se	ged and myself marked twenty wells in the filter building
and supervis	ed Meterlie personnel in the moving of agrupment and
materia a in	ou way,
at uppr.	1630 Empire Soils personnel decorned their equipment
and started	coming the concerte floor in the filter building we managed
to get four	borings done and the rigs set up for tonomor.
Left site at	
Y	
<u> </u>	
<u> </u>	
· .	
)	1 1) Clean
	July -
	-

Mclaren Hart	PROJECT NAME: BP American PROJECT NO.: 09 086/056002 PREPARED BY: R.C. Broken	DATE:
PROJECT DESCRIPTION	- Building Foundation work - VEW, Alw, PZ well installation	
WEATHER CONDITIONS	temp 42	
SITE CONDITIONS:	wet and myddy	
PRSONNEL ON SITE: HART: R. Delisio R. Becken S. OTHER: HAA, EMY	C. Baumgartner, B. Radus, C. Rothe 121 Fenora 100 Soil, W.S. Johnson, Cerrone	erford, T. Panka, D. Ciglan
EQUIPMENT IN USE: HART: HATO LE	ruck mounted drill rig track mon	ntop drill rig bookhoo
	FIELD CHANGES:	

The state of the s

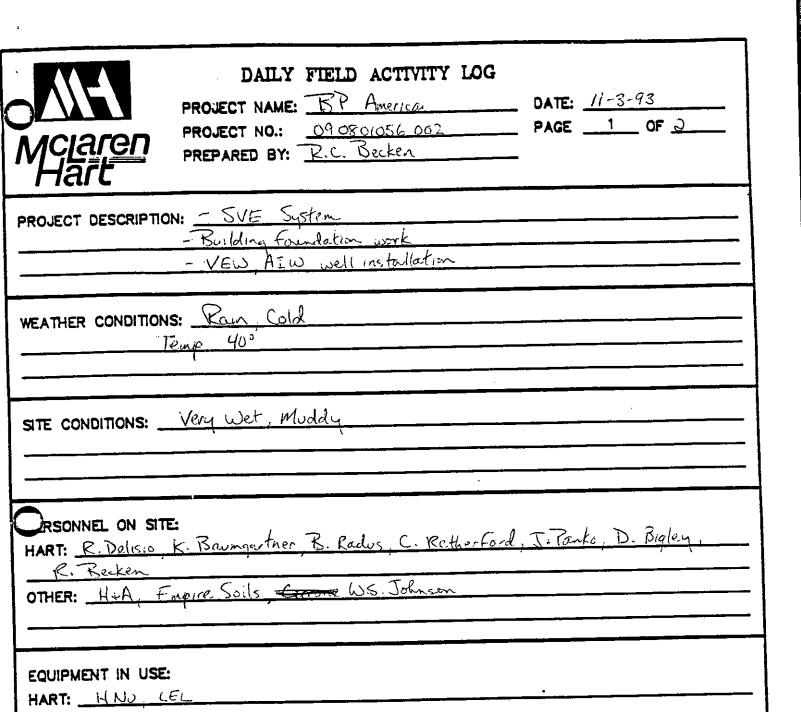


PROJECT NAME: BP America DATE: 11-4-93

PROJECT NO.: 090801056002 PAGE 2 OF 2

PREPARED BY: RC. Becken

ACTIVITIES:
Empire Soils annal on site at 0x00 today they used no
truck mounted dill sig and one track mounted sig. At apper 1030
they mus out or destuding for the PZ wells. Two seen members
left site to user one how to be tray and find more tuking they
couldn't find any at appr 1100 the track mountal in broke down
the crow reeded an allow wrench to repair it but didn't have one
Mc Care Hant supplied it, Rig was down appr. one hom. Both
ugs continued dieling the sest of the day dieling AIW + VEW
Two crew members from WS Tohnson argued at 0715 and worked all
day on foundation walls for the treatment building. One load of
_ orderett was delivered at appr. 1330 while of loaden he ent
stuck in the and and arrived without test explinations a Bob Siger.
Brian and myself worked on the placement and sing of the existin colo
in the morning. After lunch we met with field took up
through the filter building to discuss what had to be moved out of our
way and where we were going to place the wells. The surveyors more
at 1635 to place some bouch marks in the felti building on un, this well
be done so we have reference points for our well placement.
At 1400 a load of concrete arrived to finish up the pourse of the
South was frendation woll for the treatment plant.
The two rings from Empire Koil finished 5 wells each today the best
don thenive had since I've been here.
Signal Koven and I worked with the curveyor and placed ten reference points
uside the felter building lef! site at 1900
J



place well boring soils unto poly until screened then place into approvate

CONTRACTOR: Driller Rias Backhoe,

SPECIAL ORDERS / FIELD CHANGES: ____

rolloff bex

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	Mc <u>laren</u> Hart

MCIaren Hart	DAILY I PROJECT NAME: _ PROJECT NO.: _ PREPARED BY: _	09.0801056	LOG DATE: _//-3 PAGE _ 2	
the stoop so a until super. 1100 the coils convento escar (field) u ei clean soil-les his Johnson p hours due to a ESI had one ni	repair part to We receive D who well do with the HNU the sthem 3 ppm , consorted worked reather (rain).	ensure to the come to come the were to confirmental soil - on foundation we do not soil and the confirmental soil -	second crew had to a crew destrict and substance of what experiente the approvate greater than 3 pporter are hall promise to dilled. for contaminated of	to do with I on poly nolloge box P several

PIN _O
Mclaren Hart
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DAILY	FIELD	ACTIVITY	LOG
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PROJECT NAME: BP America DATE: Nov 2, 1993

PROJECT NO.: 09 0801056 000 PAGE 1 OF 2

PROFERENCE BY: REDelision

Hart PREPARED BY: R.F. DELISTO
PROJECT DESCRIPTION: SVE System - Building Foundation wall pour VEW, APW, Picz. well installation.
WEATHER CONDITIONS: Clear, Cold Temp 40-50 F
SITE CONDITIONS: Very Wet. Some greas drying.
ORSONNEL ON SITE: HART: R. Delisio, K. Bengeher B Radus C. Retterford, J. Parko, R. Breekin, D. Rigley OTHER: HSA, WS. Johnson, Empire Soils
EQUIPMENT IN USE: HART: HNW, LEL CONTRACTOR: Backhoe, Concrete Truck, Driller Rigs
SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME: BP America DATE: Nov 2, 1993 PROJECT NO.: 09.0801056 PAGE 2 OF 2 PREPARED BY: RF. Delisio
MIH had conference call w/ BP, HEA and DFC regarding soils handling, and ex-situ cell locations. No answers were finalized but MIH has been informed they need to segregate clean and dirty soils during drilling and trenching. Fach amount of soil generated per well must be individually drumed field screened and dumped into appropriate roll-off box. MIH will contact BP about final plans.
ESI contined drilling of VEWS, AIWS, and piezometers in Northeast area. One of ESI is rigs broke e 11:30 cm. Only eight wells were completed by both rigs. D. Nostrat of His A approved well tocations in west area. MIH will attempt to finish work (layouto rells) in west area.
N.S. Johnson contined forming of walls along south side of bldg. Concrete was powed into south wall at approx 2:15 pm. MIH noticed approx. 40-50 feet of the wall was powed. Three cylinders were collected for sampling. Terrone continued fandation excavation for WS. Johnson
Rick Breckie mobilized to site to fake over site supervisor position.



Mclaren Hart	PROJECT NAME: BPAMERICA DATE: Nov 1, 1993 PROJECT NO.: 09.0801056 PAGE 1 OF 2 PREPARED BY: R.F. Delisio
- Bldg	N: SVE System foundation formwork Linstallation
WEATHER CONDITIONS	Cold Windy, Rainy/Snow 25°-40°F.
SITE CONDITIONS:	Very Wet. Snow covered
PRIONNEL ON SITE HART: R. D. L.: D. Bigley. OTHER: HEA.	5, 5, K. Baumgertner, C. RetherFord, B. Radus, Empire Soils, W.S. Johnson
EQUIPMENT IN USE: HART: HOU	
	FIELD CHANGES: er Construction of Soils

Englishers a Makabahahahahaha

<i>M</i> 4	
MC <u>larer</u> Hart	7

DAILY FIELD ACTIVITY LO	Ω	ЛΥΥ	ACTIV	FIELD	MLY	D.
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PROJECT NAME: BP America	DATE: Nov. 1, 1993
PROJECT NO.: 09.0801056	PAGE OF 2_
PREPARED BY: RF Delisio	

ACTIVITES: McLaren/Hart orrived on site to find approx. 3" of snow on the grand. Area was very wet and nuddy. Cerrose Inc. chase to call off because of weather conditions. W.S. Johnson contined work on foundationwalls and footnings. ESI continued drilling of AIWS VEWS and Dietometers in NE area. Weather conditions did not allow for high productivity. M/H HiA and DEC has Monday meeting repording construction work. M. Dostor had several comments regarding Ex-situ cell location and construction. He informed milling troalized by Wedworday.
Mclaren Hort orrived on site to find approx. 3" of snow on the ground. Area was very wet and nuddy. Cerrone Inc. chose to call off because of weather conditions. W.S. Johnson contined work on foundationwalls and footings. ESI contined drilling of AIWS VEWS and pictometers in NE area. Weather conditions did not allow for high productivity. MH HiA and DEC has Monday meeting recording construction work. M. Doster had several comments regarding Ex-situ cell location and construction. He informed mill he would talk of D. Langshow to get something
of snow on the grand. Area was very wet and nuddy. Cerrose Inc. chose to call off because of weather conditions. W.S. Johnson contined work on foundationwalls and footings. ESI continued drilling of AIWS VEWS and Distanctors in NE area! Weather conditions did not allow for high productivity. M/H HiA and DEC has Monday meeting recording construction work. M. Dostor had several comments reaching Ex-situ cell location and construction. He informed mith he would talk w D. Langshow to get something
nuddy. Cerrose Inc. chose to call off because of weather conditions. W.S. Johnson contined work on foundationwalls and footnings. ESI continued drilling of AIWS VEWS and Dietometers in NE area! Weather conditions did not allow for high productivity. M/H H! A and DEC has Monday meeting recording construction work M. Doster had several comments regarding Ex-situ cell location and construction. He informed m/H he would talk of D. Langshow to get something
of weather conditions. W.S. Johnson contined work on foundationwalls and footings. ESI continued drilling of AIWS VEWS and Dietometers in NE area. Weather conditions did not allow for high productivity. M/H H: A and DEC has Monday meeting recording construction work. M. Doster had several comments regarding Ex-sity cell location and construction. He informed m/H he would talk of D. Langshar to get something
ESI continued drilling of AIWS VEWS and Distanctors in NE area! Weather conditions did not allow for high productivity. MIH HiA and DEC has Monday meeting repording construction work. M. Doster had several comments regarding Ex-situ cell location and construction. He informed MIH he would talk w D. Langshow to get something
ESI continued drilling of AIWS VEWS and Dietometers in NE area! Weather conditions did not allow for high productivity. M/H H! A and DEC has Monday meeting repording construction work. M. Dostor had several comments recording Ex-situ cell location and construction. He informed m/H he would talk w/ D. Langshow to get something
ESI continued divilling of AIWS VEWS and pierometers in NE area. Weather conditions did not allow for high productivity. MIH HEA and DEC has Monday meeting regarding construction work. M. Doster had several comments reaciding Ex-situ cell location and construction. He informed mIH he would talk w D. Langshar to get something
Diezoneters in NE area! Weather conditions did not allow far high productivity. M/H HiA and DEC has Monday meeting repording construction work. M. Dostor had several connects reaching Ex-situ cell location and construction. He informed m/H he would talk w/ D. Langehow to get something
Diezoneters in NE area! Weather conditions did not allow far high productivity. M/H HEA and DEC has Monday meeting regarding construction work. M. Dostor had several connents reaching Ex-situ cell location and construction. He informed m/H he would talk w/ D. Langehow to get something
did not allow for high productivity. M/H H: A and DEC has Monday meeting recording construction work. M. Dostor had several comments reording Ex-situ cell location and construction. He informed m/H he would talk w/D. Langehow to get something
M/H H! A and DEC has Monday meeting regarding construction work. M. Doster had several connents regarding Ex-situ cell location and construction. He informed m/H he would talk w/D. Langehow to get something
M/H H! A and DEC has Monday meeting regarding construction work. M. Doster had several connents regarding Ex-situ cell location and construction. He informed m/H he would talk w/D. Langehow to get something
regarding construction work. M. Doster had several comments regarding Ex-situ cell location and construction. He informed MH he would talk of D. Langehow to get something
Several comments regarding Ex-situ cell location and construction. He informed MH he would talk of D. Langelen to get something
he would talk of D. Langehow to get something
he would talk of D. Langshow to get something
Finalized by Wednesday.
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Mclaren Hart	BBO IECT NAME: F	ELD ACTIVITY LO 3P America 09.0801056 CF Delisis	DATE: Oct	3-9 1993 OF 2
- Gradin	ection (tou g of South istallation	ndations)		
WEATHER CONDITIONS	50° - 40	indy No	air	
SITE CONDITIONS:	Dry, Clea			
PRSONNEL ON SITE HART: R. Delis K. Pamaat OTHER: HEA, Co	sis T. Park	o, B. Radus, a WS Johnson.	C. Retherfore	J, S. Kateash
EQUIPMENT IN USE:		Deall sugar	Crane	
		se Drill rigs		

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\	<i>ıc<u>ıaren</u></i>
\	Hart

PROJECT NAME: RP America DATE: Oct 29 1993

PROJECT NO .: 09.0801056 PAGE 2 OF 3

PREPARED BY: RF. Delisio

ACTIVITIES: Empire Soils Finished Flushing PW-Z. Hole Clynes of All cuttings Holse Flushin sound times with Clean Had WARR Durlity on final flush was closed to partly clouds Hole massured AFRE first flushing Bettern OF hole AT SYFT Below ground Surface, the was sounded with weighter TADE AND no sedement in better of hole was industry Enpire spent MOST of Athenson DECORNING RIY AND CLEAN-UP OF THEIR VELL SITES Rig & FLATWARD TRULK TAKEN OFFSITE, EMPIRE GROWNER WILL CHEW OFFSITE AT ANDROX 11:00. THE RIST OF their MATERIAL will be cleaned up on menday Nov. 1 1943. Cerrone Inc disposed of drill cutting from PW-1. They removed stockpiled soils from PW-2 area and transferred to roll-off box. Additional operator and labouer cleared reef Industries and piping from Terra Vac Study coea. Grading of this began and cutting of drainage dit W.S. Johnson continued forming of walls and footings in building foundation. They asked if they could pour foundation walls in large sections (40-60 ft. MIH called B. Klaverkans to get answer about wall length B. Klaverkomp said to pour in no more than sections. MH informed WS Johnson that any changes they make must couply with standard codes Empire Soils continued drilling of VEWS AIWS and Dież. One rig and crew concentrated on piezometos little the other did AIWs & VEWs. MIH started layout of wells in West area. Approx.

1/4 of nells were located and martled



DAILY FIELD AG	CTIVITY LOG
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Mclaren Hart	PROJECT NAME: BP AMERICA DATE: Oct 38 1993 PROJECT NO.: 09.0801056 PAGE 1 OF PREPARED BY: RF. Delisio
- 1ES	SVE System AI piez drilling in NE area ndwater well installation ing foundation - Site work
WEATHER CONDITIONS	: Windy Cold - No rain 40-50° F
SITE CONDITIONS:	Dry Clear.
RSONNEL ON SITE RART: Rether other: His A	isio B. Radus J. Parko K. Baumgertner, Ford, S. Katzenstein, D. Bigley. EST, Cerrone WS. Johnson
EQUIPMENT IN USE: HART: HOU I CONTRACTOR: Do Concrete	
SPECIAL ORDERS /	/ FIELD CHANGES:



DATTV	क्षांचा 🗅	ACTIVITY	TOG
DALLI		ALIIYIII	The state of

PROJECT NAME: BP America DATE: Oct 28, 1993

PROJECT NO .: 09 080 1056

PREPARED BY: RF Delisis

PAGE 2 OF 2

ACTIVITIES:
Cerrone continued footing and wall excavations.
W.S. Johnson completed formwork for south
wall and east footings. Three tooters along
south wall use porred by WS. Johnson @ 4:30 pm
MIH took 3 cytuders for sampling.
Cerrone began chearing and grubbing of east area
west area and southeast of filters bldg. They
also continued backfilling excavations in NE area.
Previously backfilled excavations were
compacted w/ backhae bucket.
water the state of
) His A MIH and Help Wilbur determined line to Offices was one ESI hit on Friday Oct 22 1993.
The shot off valve in the building must be
inoperable. MIH turned off biffice bldg water
by shutting off value installed by Cerrone during
Dipe repair.
MIH lined roll off box for soil containment. ESI
suggest agreed to load druns into dimoster
for subsequent removal to load ex-situ cell.
FSI agreed to do this at no additional charge.
Groundwater well PW-2 was flushed by ESI.
Whiter was transferred to storm sever as
previously done. MIH estimated only I more
day of flushing - before well is ready for development
Cerrone Stoned access road to ex-situ cell.
K), Oppisio

	W.	
M	c <u>iar</u> Hart	<u>en</u>

DAILY	FIELD	ACTIVITY	LOG		
_	RD	A		OATE:	00

PROJECT NAME: BP Annica DATE: Oct 27 1993
PROJECT NO.: 040801056 PAGE 1 OF 3

PREPARED BY: RF Delisio

mai L
PROJECT DESCRIPTION: SVE SYSTEM VEW AIW INSTAllATION: GW WELL INSTALLATION : 131dy footen work: ROAD & PARKING AREA INSTALLATION
WEATHER CONDITIONS: PARTLY Sunny, Temp 45-550 SW WINDS 10-20
SITE CONDITIONS:
PRSONNEL ON SITE: HART: B. DELISIO; C. RETHERFORD, K. BAUM GARTNER, B. RADUS, STEVE KAT ZENSTEIN; DON BIGLEY OTHER: HEA; W.5 Johnson Inc. Arman D. CERROWE INC. EST
EQUIPMENT IN USE: HART: HMM, LEL, DRAZER CONTRACTOR: DOZER, Moller, DRILL Rig, BACK HOE, Dump Truck
SPECIAL ORDERS / FIELD CHANGES: Field change for installation of 2" well screen instead of 2" in ATWs



PROJECT NAME: BP America DATE: Oct 27,1993

PROJECT NO .: 09 08 01056

RF Delisio PREPARED BY: _

PAGE _ _ OF _ 3

ACTIVITIES:
EMPIRE Soils continued flushing OF AW-1: An Additional
Dump was incorporate to help with flushing of well.
THE TWO PUMP SET UP help to REMOVE SILTS from OPEn hole
And RELASE ROCK Cuttings & SAND. ADDIVXINATELY 1325
galling of water usED to flush hole, Final wash/flush
produced little Cuttings and basinelly clips WATER, EMPIRE
C) SANSA WAS AND AND MORE OF PW-7 WASh
Rotary DRILLY OF PW-Z STARTED AND DRILLED TO A depth of
17-18 ft BGS OR ADDROX 5-6 ft into BELLOCK, DRilling will
Continue on Thursday Oct 28, 1493.
Empire Soils Also Completed 3 VEWS MO 10 AIWS. THESE WELLS
12 holids 4-VEW, 2-VEW, VEW-15 AIW-11 AIW-14
AIW-17 AIW-19 AIW-35 AIW-38
AIW-27, AIW-31, & AIW-16.
Cerrone Inc. continued placement of stone in parking
area. Also foundation wall trenches were
excavated. W.S. Johnson formed and rebored
5 footers along south wall of building, Concrete
was poired @ 11:00 am. ESI took 3 cylinder
and tested concrete for slump. MIH will have
Cylinders tested @ 7 and 28 days. WS Johnson
will continue work along east wall. B. Klaverkomp
Suggested walls be poured in 30' sections. Joints will
be completed with Keyed notch and sealant on
- outside of wall.
HEA contracted with utility locating company to find
MEA contracted with OTHING REALING CONTINUE tomorrow underground lines in NE area Work will continue tomorrow
anderground likes in the over will continue
Generator is completely installed tested and operational.
Generator 15 completen installed lester of the



PROJECT NAME:	BP Anerica	DATE:	10/27	193	3
			3		
PREPARED BY:	IF Delisio				

TIMTIES:	
	employers of HEA MIHE Metallics
identify s	witches for turn on of pump if
electricity	is lost. HEA coare M/H permission
to continu	p drilling of wells in NE area near
water ma	ina '
<u> </u>	
· .	
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1114
Mc <u>laren</u> Hart

PROJECT NAME: BP America DATE: Oct 26, 1993

PROJECT NO .: 09.0801056 PAGE 2 OF

PREPARED BY: R.F. Delisis

Rolet J. Oglisio

ACTIVITES: Flyshing OF PW-1: Empires Soils started to flow out habe AT Approx 08:35 AT 0855 Flushing shaped. Big Tender (Florantia) WAS out of witherand window at Start. Empire Spent From 09:10 to 13:50 Taying to get Flat water Running. Flatwater STARRO AT 13:55. From 13:55 - 14:50 Flatwater was Fillion up. Flushing restrated AT 14:55 the flushed antil 16:04. Approx 1800 pollins of vater Flushio Through well. When Flushing was shopen, there appeared to be Approx 8:9' of Septimat still in hole. Septimat cursust primarily of Sano & S.H. Septimat livel will be chick in Am of Oct 27 1993 And Flushing will continue. Thise Amorras to be frances or voids in the dispar rock ment of the hole that if we contain to the Sand/S.H solum problem. If further Flushing post out work an alternation method or well consumer may be neared. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug foundation wall and footings and continued completion of access road and site work. Several questions were brought up regarding dimensions on drawings. MIH contacted
Approx 08:35 AT 08:5 Flushing SNOWLD. WAS out of workerns would not Strut. Empire Spent From 09:10 to 13:50 Tayin, to get Flot worke Running. Flotworke STARRO AT 13:55. From 13:55 - 14:50 Flotworke was: Fillso - up. Flushing RISTARTED AT 14:55 Hole flushed until 11:04. Approx 1800 pellows of worke Flushing training well. When Flushing was shopen, there appeared to be Approx 8:9' of SERIOUT still in hole. SEDIMAT CINSTST primarily of Sano & Sit. SEDIMAT livel will be chick in An of Oct 27 1993 And Flushing will continue. There approxes to be franced as voice in the distar rock ment of the hole that itrecontributing to the sand/sit sold problem. If further Flushing post not work an alternation method or will consmitted to site to begin form work for South wall of foundation. Cerrone Inc. dug foundation wall and footings and continued coupletion of access road and site work. Several questions were brought up
OG! 10 to 13:50 Taying to get Flat water Running. Flatwater STARRO AT 13:55. From 13:55 - 14:50 Flatwater was: Filled - up. Flushing restrated AT 14:55 the flushed until 16:04. Approx 1800 gallins of water Flushing that your still in hole. Second Consists Approx 8-9' of Septimut still in hole. Second Consists primarily of Sand & Silt. Second livel will be check in Am of oct 27 1993 And Flushing will continue. There Approx to be france or voids in the dispar rock means of the hole that it was contacting to the Sand /Silt solum problem. If further Flushing post net work an Alternation method or will communion may be never a South wall of foundation. Cerrone Inc. dug foundation wall and footings and contained completion of access road and site work. Several questions were brought up
STARRO AT 13:55. From 13:55 - 14:50 FLATINATION WAS FILLIO - UP. Flushing RISTARTED AT 14:55 Hole flushed Until 11:04. Approx 1800 pellous of warm flushing through WEll. When flushing was shopen, there appear En to be ADDIX 8:9' of SEDIMUT Still in hole. SEDIMINE CHICK PRIMARILY OF SAND & S.H. SEDIMINE WIll cultimate. There ANDERS to be framed on voids in the distance rock means of the hole that ithe contributing to the sand/s.it solum problem. If further flushing now not work an alternation method on well consmitted may be neared. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug foundation wall and footings and contined completion of access road and site work. Several questions were brought up
Filler - up. Flushing RISTARTED AT 14:55 Hole flushed until 11:04. Approx 1800 pellins of water Flushing that shopen, there appeared to be approx 8:91 of September still in hole. September Consisting of Sano & S.H. September livel will be check in Am or oct 27 1993 And Flushing will custing. There appears to be fractive or voids in the displace rock means of the hole that if the Control to the sand /s.H solling problem. If further Flushing post not work an alternation method on will consider many be nessed. W.S. Johnson mobilized to site to begin form work for south wall of foundation. Cerrone Inc. dug faundation wall and footings and continued completion of access wall and footings and continued completion of access road and site work. Several questions were brought up
Fillso-up. Flushing ASSTRATED AT 14:53 MOTE FROM 18 UNTIL UNTIL 11:04. Approx 1800 pollins of water Flushing the stronger, there appeared to be appeared to the distance of the hole that if the Control to the small site sould be appeared to be appeared to the problem. If further flushing nost net work an alternative method on will communion may be nessed. W.S. Johnson mobilized to site to begin form work for south wall of foundation. Cerrone Inc. dug foundation wall and footness and continued completion of access road and site work. Several questions were brought up road and site work. Several questions were brought up
well when flushing was shopen, there appeared to be ADDINK 8-9' of SEDIMUT Still in hole. SEDIMUT CIRSUST PRIMARILY OF SAM & S.H. SEDIMUT livel will be chuck in Am of oct 27 1993 And Flushing will continue. These appears to be framed or voids in the displan rock means of the hole that ithe Contribution to the SAMILS. It solm problem. If feather Flushing post net work an alternative method or will construction may be nessed. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug faundation wall and footings and continued completion of access road and site work. Several questions were brought up
WELL WHEN Flying WAS SHOPED, There Applying to the orall Applying 8-9' of SEDIMUT Still in hole. SEDIMUT CONSIST. ADDING 8-9' of SEDIMUT Still in hole. SEDIMUT CONSIST. PRIMARILY OF SAMO & S.It. SEDIMUT level will be chick IN AM OF OCT 27, 1993 AND Flying will continue. There Applyees to be fractife or voids in the displane Rock Areast of the hole that itrescention to the same Rock Areast problem. If further Flying Does not work an Alternation method or will commute may be respective. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug foundation wall and footings and continued completion of access road and site work. Several questions were brought up
ADDIX 8-9' of SEDIMUT STILL NOTE. SEDIMUT LIVE WILL BE CHICK PRIMARILY OF SAMO & SILT. SEDIMUT LIVE WILL BE CHICK IN AM OF OCT 27 1993 AND Flying WILL CONTINUE. THERE ADDITIONS to BE FRANCES OR VOIDS IN THE DISTURBLE ROCK MEAST OF THE hole that ithe Contribution to the SAMO/S. It solling problem. If further Flying DOST not work an Alternative method OR will consumers may be nessed. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug faundation wall and footings and contrined caupletion of access road and site work. Several questions were brought up
primarily of Sano & S.I.F. SEDIMINE MILL WITH SEDIMINE IN AM OF OCT 27 1993 AND Flushing will continue. There is Approved to be fractife on voids in the displace rock means of the hole that is suffered to the sand/s. It solm problem. If further Flushing nois not work an alternation method on well considering may be neighbor. W.S. Johnson mobilized to site to begin form work for south wall of foundation. Cerrone Inc. dug fandation wall and footings and contrined completion of access wall and footings and contrined completions were brought up road and site work. Several questions were brought up
Approves to be fractif or voids in the disple rock means of the hole that ithe contributing to the sand/s. It solling problem. If further Flushing nost not work an alternation method or will commution may be nessed. W.S. Johnson mobilized to site to begin form work for south wall of foundation. Cerrone Inc. dug faundation wall and footings and contrined completion of access road and site work. Several questions were brought up
Approves to be frankel as voids in the agent Rock them, of the hole that its contribution to the sand/s. It solling problem. If forther Flushing nost not work an alternation method on will commution may be nessed. W.S. Johnson mobilized to site to begin form work for south wall of foundation. Cerrone Inc. dug foundation wall and foothings and contrined completion of access wall and foothings and contrined completion of access road and site work. Several questions were brought up
problem. If further Flushing now not work an Alternation method on will commution may be needed. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug faudation wall and footings and contrined caupletion of access road and site work. Several questions were brought up
problem. If further Flushing DOST NIT WORK IM ATTENTION OR WILL CUSTAMUTION MAY be MEDED. W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug foundation wall and footings and contrined completion of access wall and footings and contrined completion of access road and site work. Several questions were brought up
M.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug faudation wall and footings and contined completion of access road and site work. Several questions were brought up
W.S. Johnson mobilized to site to begin form work for South wall of foundation. Cerrone Inc. dug fandation wall and footings and contrined completion of access road and site work. Several questions were brought up
South wall of toundation. Cerrone Inc. dog seneral wall and footings and contrined completion of access road and site work. Several questions were brought up
South wall of toundation. Cerrone Inc. dog seneral wall and footings and contrined completion of access road and site work. Several questions were brought up
road and site work. Several questions were brought up
road and site work. Several questions were stored
The state of drawings in milities
The state of the s
carpenters @ W.S. Johnson. All questions were answered.
To solit show
MIH and His A signed a field modifications for split spece
Jampling and boring reductions.
The was
ESI continued drilling w/ 1 rig in the NE area. They inst
AIWs and VEWs. No major problems were encountered. AIWs and VEWs. No major problems were encountered.
They drilled 4 wells and had to reas that are ESI to Stay out of areas near water lines that are
unknown.

Mclaren Hart	DAILY FIELD ACTIVITY LOG PROJECT NAME: BP America PROJECT NO.: 09.0801056 PREPARED BY: R.F. Delisio	DATE: Oct. 25, 1993 PAGE 1 OF 2
· VEW,	ell installation AIW, Piez. installation Construction Sunny, Clear, Coo 50'-60" F	
5. Katze		ard, D. Bigley, The, Mesch Eng.
EQUIPMENT IN USE HART: HNU	ackhoe, Dozer, Roller	. Hand Compactor
SPECIAL ORDERS	/ FIELD CHANGES:	

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Servicina property of the service of



PROJECT NAME: BP America

PROJECT NO.: 09.080(056

PREPARED BY: RF Delisio

DATE: Oct 25 1993
PAGE 2 OF 2

CTIVITES:
Empire Soils STARTED Roller bit Drilling OF PW-1. Drilling
STARTED AT Approx. 7.8 ft B65. Which industry that their
WAS Approx 5 ft of growt in Casing. THE hole WAS DRIVED Into
he a RUK and CON IN ATS by 41 first OR 54 FIFT BGS. NO 118% BIT
Prilling was accomplished by 13:55. Circulation of water
continued to they to thish well. OPEN hole WAT FILED
with cuttings. Difficulty in flushing hole continues throughout
the Afternoon. Hole could not be flushed out / Clisaso by
DAYS END. WE will ATTEMPT to flush hole in Am. OF
Oct. 26, 1993 by pumping Clean water into hole to REMOVE
DARTICLES This will be ATTEMPTED SEUCRAL TIMES to ATTEMPT to
clan hole. If This process poet not work other thisking
sociedness will be downer with Empire Soils. Empire Soil
continued drilling of AIWS in NE area. Several
times Empire could not drill to expected
bedrock depths. It was assumed that large
rocks or builders were interfering w/ drilling. M/H
1) 12 / = - act - 1 MALING IN PILE Shalf distance and
of dell' Difference worked to those were when
problems. The Empire completed four (4) wells and
re-drilled 2.
Cerrone Inc. continued layout of building corners
and decement of road. Mirati 600x was used as
ways a profestle wider the road. The congit was
installed at the elevations given by B. Radus.
. RED of MIH noticed workn geotextile was not
anchored and did not cover 20 foot width of
road. ## RFD will confront Cerrone Inc.
about this tonorow morning
MIH finished locating wells in NE area.

	AM4
Λ	ic <u>iaren</u> Hart

V.TIACT	C.ESTS	ACTIVITY	LOG
DALL		AU	

PROJECT NAME: BP AMERICA DATE: Oct 20,93 PROJECT NO.: 09.0801056 PAGE 1 OF 3 PREPARED BY: R.F. Delisio
ROJECT DESCRIPTION: SVE System · Groundwater well installation · AIW Drilling · Bldg Site Grading
Temp. 50°-60° F No rain
SITE CONDITIONS: Beginning to dry
HART: R. Delisio B. Radus, C. Retherford, D. Bigley, K. Baungartner, S. Katzenstein OTHER: H. A., Cerrone Inc., Empire Soils
EQUIPMENT IN USE: HART: HNU, LEL CONTRACTOR: Dozer, Backhoe, Drill rigs (3)
SPECIAL ORDERS / FIELD CHANGES:



PROJECT NAME: BP America DATE: Oct 22, 1993

PROJECT NO .: 09.0801056

PREPARED BY: R.F. De Lisio

PAGE ______

ACTIVITIES: McLaren Hart located new VEW locations in NE Area. MIH & Sue Bayle of H&A walked area and approved well locations for drilling. E additional rig For VEW. Emoire ablivered Diezometer drilling. Piczoneter material were not delivered. Empire finished well materials. for drilling on AIW's. did not take he course Dlace Drocedure 00 moire bean NF area Baunaartner water services line while A3H 3 in accordance w/ emergency Dlaus. to stop flow of was service line inside manufacturing lino to 2' service Niether inc. was brought! errone excaval live at 3:00 pm. CODDEr HiA, and Metavillics Know where live was coming from or doing to. was notified of - main live @ 4:00 DW. Cerrone Inc. determined water. from Eory Road ran east-west - damaged line suggested per cerrone Inc. repair live Inc. complet errone.



777 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DAILY	FIELD	ACTIVITY	LOG
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. 2	FIELD ACTIVITY LOG		Λ·		1000
ODO ISCT: NAME	BP America	DATE:	Oct.	99	1973
PROJECT NO:			3		
PROJECT NO.	RF. Delisio				
FREFARED DI					

Папс				
ے کوئ	and value covered w fil Monda	bold and	at 7:45 pm hole was r	. Soil oped
	no of bu soil and	culvert a	nstatlation of a. Plan to i Monday	nstall
7	ig of PW-	1 (0110/e	fed. Engine	plans
· .				
0	·			



Mclaren Mart	PROJECT NAME: BP America DATE: Oct 21, 1993 PROJECT NO.: 09.0801056 PAGE 1 OF PREPARED BY: R.F. Delisio
· PW-2 · VEW, A	and PW-1 installation IW. and Diez. locating ac well abandonment s: Early Rain: Very Windy: Afternoon- Cool: Temp - 50-65 F
east a	Very Wet. Water panding in rea and on access road excavations
ORSONNEL ON SITE HART: RF. Del K. Baumgar OTHER: H&A	isio, B. Radus, J. Panko, C. Retherline, J. J. J.
•	LEL meter ackhoe, Drill Rigs,
SPECIAL ORDERS	/ FIELD CHANGES:

2.

The second secon

114
Mclaren Hart

PROJECT NAME: BP America DATE: 10/21/93 PROJECT NO .: 09.080(056 PAGE 2 OF

PREPARED BY: R.F. Delisio

ACTIVITIES:
Metaullies systems stack caught on fire at
8:30 MH HOA Funire Spils and Cerrone
enviouses evacuated site until proper identification
of har was analyted Wetaulics 1205
extinguished fire and cleared area for work
RF.D. and CAR. located well locations in NE area.
VEW wells were incorrect after field verification
by RFD r CAR. Mike Hogon sent spreadsheet
giving true well locations for VEW'S. MIH
relocated VEW's to correct location.
) Empire Soils continued abondonment of Terra
Vac wells. All well were finished. Several
shield points could not be reached and will
need to be pulled at a later date by Cerrone
or Empire. K. Baumgartner will Keep track of
time. All pipe : well screen will be steam cleaned
and disposed of in dumpsters.
and disposed in dome
EMPIRE Soils Also continueD. Placement of SURFACE CASINGS
for a amed was a extraction pumping wells. Surtace Using Dir
PW-2 SET AT 12.4-12.5' TOP OF ROLK WAS ASSIGNATED AS
A Depth between 11.1\$ 11.4 BGS. The 12" Carhon Still Casing
WAS SET AND GROWTED to ground level. Growt WAS PLACED in OPEN
(again 2 + ft) prior to placing casing. Empire moved off hole
- DO TO PW-1. PW-1 STARTED AND DRITTED to A DIDTH 11.5 (top OF ROL
EMPIRE WILL ATTEMPT to Anyer Ift into ROLK Their SET CASING TOMORROW

Mclaren	PROJECT NAME: BP America DATE: Oct 20 1993 PROJECT NO.: 09.0801056 PAGE 1 OF PREPARED BY: R.F. Delisio
- PW-	Drilling
	s: Partly Cloudy, No rain 50°-60°F
SITE CONDITIONS:	Most areas starting to dry out.
ORSONNEL ON SITE HART: R Del Retho OTHER: H&A	isie B. Radus T. Penko, S. Kateenstein, erford K. Baumgertner. Empire Soils, Cerrone Tric.
EQUIPMENT IN USE HART: HNU CONTRACTOR:	Microtip Ozer (D6), Backhoe
	/ FIELD CHANGES: nonges pertaining to PW-2, PW-1 installation (See Attached Letters)

E : wall the man stronger and the parties have profite by the contract of the



PROJECT NAME: BP America DATE: 10/20/93

PROJECT NO.: 09.080(056

PREPARED BY: RF. Delisio

PAGE 2

ACTIVITIES: Classing and
levers Inc. Degan chegital dis
excavation of acress road area for placed
COMPLET INSTALLATION, Developed
in albrox. 14 x ao sections i sections
not invarated. CET CITY
either this at middle control
taking days tence. The per of the
will be back to continue work triday.
Mark Condition of Town of Wheatfield gave permit
Mark Cindric of Town Contract Alack also
to use of hydrants by chouse and exact
3000 800 0000
) locations (duly more or towns
Authority.
En Sile began to abondonment of Terra Vae
- White south with the sample ports (12 0)
Study wells. A live wells
were pulled teachers to site
The Distance of the Control of the C
PW-2 STARTED: Installation Change/ Procedure AT Specifics in ATTACKED
AT 12 1 NA DAY, DEPARENTAL
Out 2 countries AT MARCOXIMATELY 11.4', WEATHER BEDROCK
11 7 11 12 8 KM 14 50 FROM 1 1/103/10/12 WORKER 1 1/103/10/12
Though Conversations with HIA TRICK RESS. WILLIAM
11) A GLOS ASSESSI MAUS MALAN II WAS CIGNATURED TO
A HIS OF THE CASE OF THE CASING CONTINUED CASING CONTINUED
1) I to Charles Brigh Walker 13 Thinky to per
a a disa Telubry OssikED Ospita is Reach 12 Using
AND GREATED. PW-1 WILL THEN BE STARTED.
177711) (J. C. C. C. L. C. L. J. C. L. L. C. L. L. C.

INC. ALD R 8



Geotechnical Engineers & **Environmental Consultants**

Advance Copy Faxed 20 October 1993 File No. 79002-56

ALDRICH Inc.

McLaren Hart McLaren Hart Field Trailer Metaullic Systems Inc. 2050 Cory Road Wheatfield, New York

Ista brond fax Iransmi	Ital memo 7671 # of pages > Z
TO STEVE L.	411-
Co.	Co.
Oept.	Phone #
Fax #	FOAT

Attention:

Mr. Steve Katzenstein

Subject:

Construction Alternatives, PW-1 and PW-2

Soil Remediation and Groundwater Treatment Project

Carborundum Facility, Wheatfield, New York

Dear Steve,

As we discussed, BPA/Haley & Aldrich will allow either the screened/open hole or open hole well completion as described in your 19 October 1993 letter. We believe the open hole completion has several advantages including ease of installation, providing more space for pump installations and reduced concerns about fouling the well during drilling. Given these advantages we urge you to strongly consider the open hole completion. We do, however, want to reiterate that the decision on the type of installation and related well performance is McLaren Hart's responsibility.

We also believe the open hole completion will result in decreased well installation costs. If you choose to construct the open-hole completion, please advise BPA of the cost reductions associated with the installation. Also, a completed field modification form will be required prior to beginning drilling. Please contact Sue Boyle for a blank form.

We have already contacted Martin Doster of the NYSDEC to advise him of the situation. He has verbally agreed to allow the open hole installation.

8001 Sweet Valley Drive Cleveland, OH 44125 Tel: 216/328-1045 Fax: 216/328-9258

Offices Cambridge, Massachusetts Denver, Colorado

Glastonbury, Connecticut Scarborough, Maine Silver Spring, Maryland

Bedford, New Hampshire Rochester, New York

McLaren Hart Field Trailer 20 October 1993 Page 2

If you have any question or require additional information, please contact us.

Sincerely yours HALEY & ALDRICH INC.

David J. Hagen Environmental Services Manager

.cc Don Langshaw - BPA
Martin Doster - NYSDEC
Matt Plautz - McLaren Hart
Sue Boyle/Dave Nostrant - H&A Field Trailer



FIELD MODIFICATION DIRECTIVE No.: / **GENERAL** ___ Date of Work: ____ 10 20 93 Field Modification No.: _____ Recovery Well Installation Day _____ of Work Activity _ Dewatering Production FIELD MODIFICATION diameter specified Masing 10.0 Inches fart Mark Plan was hance to 12.0 inches Minimum required annulus is 4.0 inches, exceeded in annulus space 10.010 casine with well construction with Screeny Shale trap Will COMMENTS seated 1-2' into competent 12.0 inch casing well construction open-hole type H+A/BP will allow either type of well construction (completion. McLaren Hart is responsible for construction of performance ESTIMATED LABOR additional labor required modifications. these field ESTIMATED MATERIAL No additional regarding 5' well screen/shale 12.0 inch casing will replace 10.0 in casing. Casing length willalso be 1-2' longer than onigina

specified w/ wellscreen/ shale trap.

FIELD MODIFICATION DIRECTIVE (continued)

ESTIMATED EQU	JIPMENT
)—NONE	
ESTIMATED SUBCONT	RACTOR COSTS
See previous	
	· · · · · · · · · · · · · · · · · · ·
APPRO	VAL
of the above noted change during the review of Contractors own risk. If the field modification responsible for measures necessary to correct the proceed with other approved construction activities proposed field modifications. The Owner/Own resolve/review field modifications in a timely man	
Contractor (Company) MCLAREN /HMT Name (Print) STEVE KATZERSTEIN	Signature 11 - Kr
Name (Print) SR Assoc. GEO SCIENTIST	Date & Time 10/20/43 0430
Subcontractor (Company)	Signature Date & Time
BP America, Inc. Name (Print) Susan Bayle (Print) Staff Environmental Geolog	

	111
W	relaren Hart

DAILY	FIELD	ACTIVITY	LOG
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Mclaren	PROJECT NAME: BP America DATE: Oct. 19 1993 PROJECT NO.: 09.0801056 PAGE 1 OF 2 PREPARED BY: R.F. Delisio
- Utilit	Soil Vapor Extraction System y Clearances vial Delivery s: Cloudy, Slight rain, Temp 50-60°F.
ponded	
ORSONNEL ON SITH HART: R. Deli	Sio, B. Radus, C., Retherford, S. Katzenstein, Sio, B. Radus, C., Retherford, S. Katzenstein, Nia. Boundary, Cerrone, Tr.C., Empire Soils.
	E: Backhoe
SPECIAL ORDERS	FIELD CHANGES:



PROJECT NAME: BP America PROJECT NO .: 09 0801056

PREPARED BY: RF Delisio

DATE: Oct 19 1993

PAGE 2

ACTIVITIES: McLaren/Hart, Empire Soils and H&A met (ocation regarding deron was tina moire was completed area may cause problem decon. I rias movina Engineering Mesch Am Niagara Boundary excavated utilities. This work will errone Inc. removed rebor from Lancaster cosp. and located along road in South Terrone (V. Cerrone) investigated culvert area and discussed installation w/ M/H Cerrone site work in area. Bulldozer for unloaded to discuss underground utilities met have good Fee! suggested bodd it drawings in Metaullies files to complet located final PW-2 placement, Well

North & 3'A West. HEA

well location

ACIAren Hart	PROJECT NAME: BP America PROJECT NO.: 09.0801056 PREPARED BY: R.F.D.	DATE: 10/18/93 PAGE 1 OF 2
	Offity Locating grid	
SITE CONDITIONS:	Wet from weekend re	
OTHER: HEA	isio J. Panko, B. Radus, rein: Cerrone Inc., Niagara P.	c. Kethertord,
CONTRACTOR: 1	Jackhoe	
	s / FIELD CHANGES:	

1114
Mclaren Hart

DAILY	FIELD	ACTIVITY	LOG
Dami	r min		

DAILY	FIELD ACTIVITY LOG	. 2110/93
FOT NAME:	BP America	DATE: 10/18/10
PROJECT NAME:	09 08 01 05 6	PAGE OF
PROJECT NO.	RED	

MCIaren	PREPARED BY: RED
Surveyor They of with of tomarr Shows continue in this regard	ved - 7:50 am re completed most of west area grid. Is a completed NE area of site and locations. They will return ou to locate utilities that are an MIH drawings. He A and Cerone red locating underground utilities NE area. MIH was I not involved Work MIH did communicate concern work MIH did communicate concern in underground gas live located
new si Cheske	bstation. Telephone Company whostation undergrand phone liver.
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PROJECT NAME: BP America DATE: 10[15|93]
PROJECT NO.: 09.0801056 PAGE 1 OF 2 PREPARED BY: R.F.D. PROJECT DESCRIPTION: Soil Vapor Extraction System - Underground Utility locating by HEA WEATHER CONDITIONS: Clear Skies, cool and breezy.

Temp 50-60 F. SITE CONDITIONS: Good HART: R. DeLisio J. Panko, B. Radus RSONNEL ON SITE OTHER: HEA Reps, D. Langshaw, Cerrone Inc. EQUIPMENT IN USE: HART: CONTRACTOR: Cerrone Inc. - Backhoe SPECIAL ORDERS / FIELD CHANGES:



DAILY	FIELD	ACTIVITY	LOG

DAILY	FIELD ACTIVITY LOG		1	 3 2	
PROJECT NAME: PROJECT NO.: PREPARED BY:	09.0801056	DATE: .			

mai L	
ACTIVITIES:	
8:00 an - Surveyors mob- through H&S training	a Began Surveying.
through H&S training	g. Deservisor
2.22 MART IN EMPIRE Soils	(P. Steiner) about
9:30 Met w/ Empire Soils drilling plans.	
	The steel
11:30 Met w/ G. Merkling	F. Tedesco (Apollo Stee)
to finalize building	SUBCONNACT.
2120 Surveyors left site	
31.30 0000	
6:00 pm Mclaren/Hart person	nel walked site.
7:00 pm All parties off sit	€
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SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT CONSTRUCTION CLOSEOUT REPORT

VOLUME II OF IV

Prepared For:

BP OIL 200 PUBLIC SQUARE 7-3556-I CLEVELAND, OH 44114-2375

Prepared By:

McLaren/Hart Environmental Engineering Corporation 8500 Brooktree Road, Suite 300 Wexford, Pennsylvania 05090

OCTOBER 1994

- This volume was not scanned refer to hard copy -

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT CONSTRUCTION CLOSEOUT REPORT

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SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT CONSTRUCTION CLOSEOUT REPORT

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Prepared By:

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OCTOBER 1994

-This contains Appendix K "Bi-weekly Progress Reports" and L "Field Modifications" Refer to hard copy for the additional appendices -



FILE

ENVIRONMENTAL ENGINEERING CORPORATION

November 1, 1993

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-4606-B Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB56-93

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 1

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 1 covering the period from October 16 to October 31, 1993 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Kenneth B. Andromalos, P.E.

Kennet B Androman

Construction Task Manager

KBA/dae Attachments

cc: Distribution

(BP\0801056\MB56-93)002.003

BI-WEEKLY CONSTRUCTION REPORT NO. 1 PERIOD OCTOBER 16 - OCTOBER 31, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): H&A and M/H performed on-site training for initial and new site workers. Building Subcontractor, Apollo Steel, conducted 40 hour, OSHA training to additional workers at an off-site location.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated stored materials in the west field area to permit layout of initial survey grid and well locations.

General Mobilization (Activity No. 02000): Completed general mobilization activities.

Soils Staging Area (Activity No. 03100): A lined and tarped roll-off container is being utilized for the temporary staging of soils until the ex-situ cell is constructed. This roll-off is currently located just south of the northeast well field area where drilling operations are currently in progress. The roll-off will later be located next to the proposed exsitu cell location.

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed groundwater wells.

<u>Driller Mobilization (Activity No. 04200)</u>: Mobilized one (1) groundwater drill rig.

Groundwater Well Installation (Activity No. 04300): Completed drilling and well development of groundwater well numbers PW-1 and PW-2.

(BP\0801056\MB56-93)002.003



Building Subcontractor Mobilization (Activity No.09100): Completed initial mobilization activities to begin treatment building construction.

<u>Foundation Preparation/Access Road Construction (Activity No.09200)</u>: Cleared and grubbed building area, surveyed building location, installed culvert with bentomat liner, and completed 90% of parking and access road construction.

Excavation/Footings/Concrete Pads (Activity No. 09300): Excavated and poured east and south wall footings. Forming south wall and piers.

Exterior Well Placement - Phase I (Activity Series 12000): Performed survey and utility checks in the northeast and west well fields. Mobilized two (2) drill rigs for the installation of the AI wells, VEW wells and piezometers. Started site preparation/grading of the south and southwest well fields to provide access for drill rigs. Installed a total of 42 wells in the northeast well field (27 AI wells, 9 VEW wells and 6 piezometers).

Extra Work: The following extra work was performed during this period:

- Installation of a stand-by generator for the back-up cooling water pumps;
- Construction of the access road for the treatment building;
- Construction of an access road at the revised ex-situ cell location;
- Abandoned the existing wells at the TerraVac test section area, and
- Performed split-spoon sampling during VES well installation.
- 2. Quality Assurance: In addition to the quality assurance activities performed by H&A, M/H performed the following additional activities:
 - Prepared six (6) concrete cylinders for unconfined compression testing,
 and

(BP\0801056\MB56-93)002.003



Progress Report Page 3

- Performed head-space analysis on soil samples during drilling operations to assist in the placement of well screens.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:

A. On-Site Hours:

This Period:

1,613 Hours

Total To Date:

1,613 Hours

Without Accident:

1,613 Hours

- B. <u>Accident Summary</u>: There were no reportable accidents during this period.
- C. Incident Summary: On Friday, October 22, 1993 at approximately 2:50 pm a water line was ruptured during well installation. The 1-1/2 " line was approximately 5 to 6 feet below the ground surface. No injuries, property damage or interruption of Metaullics or Carborundum manufacturing activities resulted from the pipeline rupture. The incident was reported immediately to BP's on-site representative, who further notified the Carborundum contacts and Don Langshaw. At approximately 4:00 pm the water line to the facility was shut-off and the line identified as an unused line off of the main water line. By approximately 5:30 pm, Armand Cerrone, Inc. began repair of the line.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No elevated HNu readings in the breathing zone were noted.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well



locations prior to drilling, and Carborundum has been contacted and has approved the locations of various M/H temporary facilities (i.e., trailers, roll-off, etc.).

- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. <u>Handling of Contaminated Materials</u>: Drill cuttings were initially staged adjacent to the drill holes on polyethylene sheeting, and later in drums. At the end of each day, this material is now moved to the soil staging area (roll-off container).

Purged water from developing the two (2) dewatering wells were collected and pumped to the on-site sewer for final discharge to the POTW.

- B. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: No lost days were incurred this period due to inclement weather.
- 6. Major Issues/Problems/Delays:

M/H is waiting for the receipt of comments from the NYSDEC on the design drawings, specifications and work plan.

The SPDES permit application is on the critical path and will be finalized as soon as M/H has received comments from Carborundum and BPA.

B. Other Activities

1. <u>Design</u>: Due to the inability to locate the permanent gravity flow discharge line in the marshy area, M/H is evaluating the ability to discharge the water from the treatment plant via gravity flow, or if pumping will be required.





Progress Report Page 5

- 2. <u>Permitting</u>: During this period, M/H received a building permit from the Town of Wheatfield for the construction of the treatment plant building. In addition, Carborundum received an air permit for this project from the NYSDEC.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:

Subcontracts Issued:

- Building Apollo Steel Corporation
- Drilling Empire Soils Investigation
- Electric Ferguson Electric Construction Co.
- Sitework Armand Cerrone, Inc.

Equipment/Materials Ordered:

- Two Groundwater Pumps
- Reef Industries Liner Material
- Pre-Engineered Treatment Building Materials

4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells - 27 Piezometers - 6 VEW wells - 9

Manpower Summary: A summary of on-site M/H manpower (including subcontractors) is as follows:

Total This Period:

1,343 Hours

Total To Date:

1,343 Hours

Projected Next Period:

1,500 Hours

(two weeks)



ENVIRONMENTAL ENGINEERING CORPORATION

Progress Report Page 6

<u>Change Orders</u>: Four (4) new change orders were performed or discussed during this reporting period. The change order log is attached for general information purposes (Attachment C).

FUTURE ACTIVITIES

A. Field/Construction

Attached is our detailed two week construction schedule for the period of November 1, 1993 through November 14, 1993. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

Within the next two weeks, M/H will be issuing a Request For Proposal (RFP) for the electrical and instrumentation work on this project. M/H will also pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by:

Kenneth B. Andromalos, P.E. Construction Task Manager November 1, 1993





ATTACHMENT A

BI - WEEKLY CONSTRUCTION REPORT NO. 1 PERIOD OCTOBER 16 - OCTOBER 31, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK





ATTACHMENT A

BI - WEEKLY CONSTRUCTION REPORT NO. 1 PERIOD OCTOBER 16 - OCTOBER 31, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

OSHA/CARBORUNDUM TRAINED WORKERS

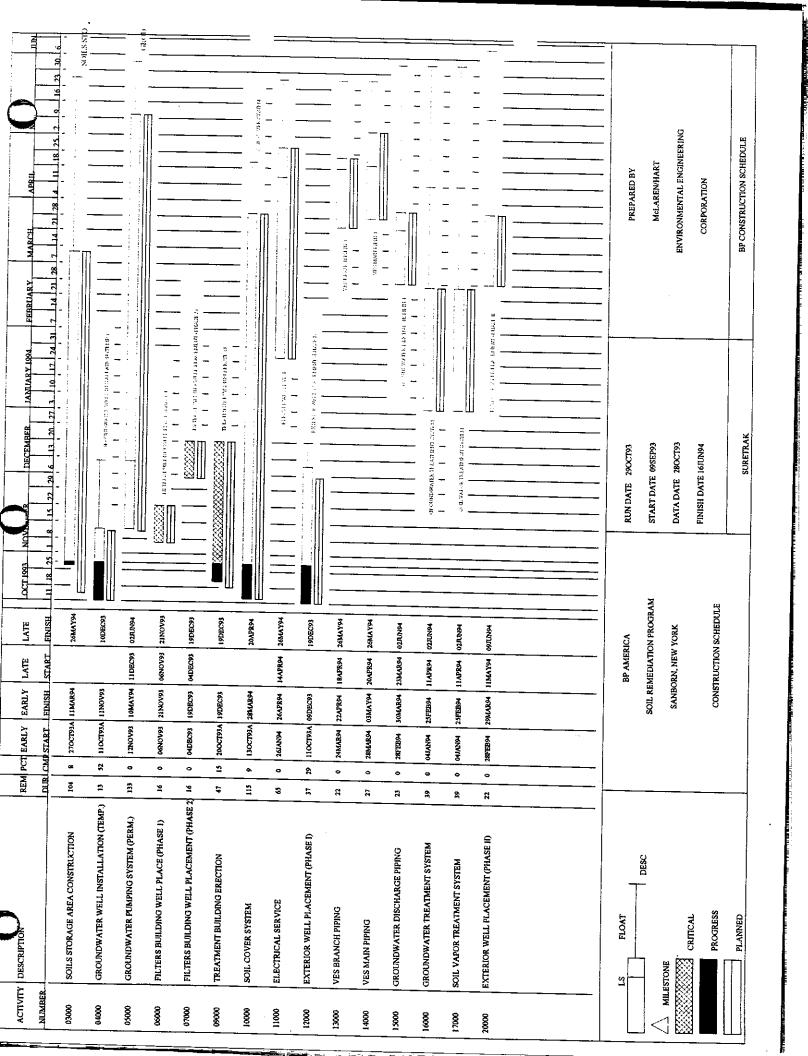
COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING	
Haley & Aldrich	Susan L. Boyle	X	X	
	Dave Nostrant	X	71	
McLaren Hart	Christine A. Retherford	X	X	
	Brian Radus	X	X	
	Robert F. DeLisio	X	X	
	Steven J. Katzenstein	X	X	
	Kevin Baumgartner	X	X	
	Donald R. Bigley	X	X	
	Ken Andromaios	X	A	
	Julie Panko	X	X	
Empire Soils	William L. Levergood	X	X	
	Steven Wolkiewicz	X	X	
	Ronald Brown	X	X	
	Kenneth Fuller	X	X	
	Thomas Kasperek	X	X	
	Dan Beitz	X	X	
	Alan Przywara	X	X	
Armand Cerrone	Vincent Cerrone	X	X	
	Frank Perri	X	A	
	Paul E. Otto	X	X	
	Billy Williamson	X	Λ	
	Donald Kneeppel	X	X	
Walter J. Johnson	Doug Janeese	X	_ _	
	Christopher V. Shakarjian	X	X	
		/).	X	



ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE







ATTACHMENT C SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE





ATTACHMENT C

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

L				
	SOIL REMEDIA	TION/GROUNDW. SANBORN, I	REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NY SITE	
		CHANGE ORDER LOG	DER LOG	
ON	TITLE	DATE REQUESTED	COMMENTS	STATUS
0	Treatment Building Relocation	7/21/93	M/H to submit with back-up, BPA/H&A to review	No change
05	Existing GRS Instrument/Electrical Modifications	7/21/93	M/H to submit with back-up, BPA/H&A	No change
03	Filter Building Valving Relocation and Piping Modifications	7/21/93	M/H to submit with back-up, BPA/H&A to review	No change
9	Groundwater Pretreatment	7/21/93	M/H to submit with back-up, BPA/H&A to review	No change
\$	Ex-situ Treatment Cell Relocation	7/21/93	M/H to submit with back-up, BPA/H&A to review	No change
90	Sales Tax Exemption	9/3/93	BPA submitted w/back-up, M/H to sign off	M/H signed
0.2	Terra Vac Well Closure	10/13/93 (Site Mtg)	M/H completed work by 10/22/93	M/H to submit
80	Install Back-up generator	10/15/93 (H&A Ltr)	M/H submitted estimated cost on 10/21/93. McLaren Hart installed by	M/H to submit actual costs
60	Split spoon sampling	10/15/93 (H&A Ltr)	M/H submitted estimated cost on 10/19/93. Currently performing work.	M/H to track extra costs and
10	Treatment building upgrade (Interior wall lining option)		M/H submitted potential building upgrade to BPA on 10/19/93. BPA to review and advise.	No change



November 1, 1993

SENT VIA FAX

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-4606-B Cleveland, OH 44114-2373

PROJECT NO. 09.0801056
SANBORN - SOIL REMEDIATION PROGRAM
LETTER NO: MFB8-93
SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of November 1, 1993 through November 14, 1993.

GROUNDWATER WELL INSTALLATION (ACTIVITY SERIES 04000)

04300 - Groundwater Well Installation

Monday, November 1, 1993

1. Decontamination and demobilization of one (1) Failing F10 drill rig.

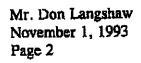
04400 - Temporary Groundwater Piping

Monday, November 8, 1993

1. Trenching and piping of temporary groundwater piping for PW-1 will begin. Work includes pipe installation, conduit placement, and pressure testing of pipe. McLaren/Hart will procure necessary controls and instrumentation in order to expedite installation.

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04500 - Groundwater Pump Installation

1. McLaren/Hart has ordered 4 Grundfos submersible pumps as specified in H&A drawing G-1 titled PW-1 and PW-2 Installation (Temporary Piping and Power). Pump delivery time is approximately 3 weeks. McLaren/Hart will install pumps and finalize piping immediately after pump delivery.

FILTERS BUILDING WELL PLACE - PHASE 1 (ACTIVITY SERIES:06000)

06100 - VEW AND AI WELL PLACEMENT (WK 1)

Wednesday, November 3, 1993

1. McLaren/Hart, Empire Soils, and Metaullics Systems will meet to discuss well locations in the filters building and to identify mechanical equipment that will need relocated.

Friday, November 5, 1993

1. Empire Soils crew will begin coring of concrete to expedite drilling work. Coring will begin at approximately 5:00 p.m. and will end by 9:00 p.m. at the latest.

Saturday, November 6, 1993 through Sunday, November 7, 1993

- 1. Drilling inside filters building will commence at approximately 7:30 a.m. McLaren/Hart will hold kickoff meeting and tailgate safety meeting at 7:00 a.m. Empire Soils will be using two (2) CME 45C drill rigs and possibly one Bobcat with auger and bucket. Well installations will be as defined by the design drawings and specifications. All well installations will be closed with either an asphalt mix or concrete.
- 2. Wells anticipated to be drilled include the following:

AI-68, AI-69, AI-70, AI-71, AI-72, AI-73, AI-74, AI-75, VEW-35, VEW-36, VEW-37, VEW-38, PZ-70, PZ-71, PZ-72, PZ-73, PZ-74, PZ-75, PZ-76, and PZ-77.





14:43

06200 - VEW AND AI WELL PLACEMENT (WK 1)

Wednesday, November 10, 1993

1. McLaren/Hart, Empire Soils, and Metaullics Systems will meet to discuss well locations in the filters building and to identify mechanical equipment that will need relocated.

Friday, November 12, 1993

Empire Soils crew will begin coring of concrete to expedite drilling work. Coring 1. will begin at approximately 5:00 p.m. and will end by 9:00 p.m. at the latest.

Saturday, November 13, 1993 through Sunday, November 14, 1993

- Drilling inside filters building will commence at approximately 7:30 a.m. 1. McLaren/Hart will hold kickoff meeting and tailgate safety meeting at 7:00 a.m. Empire Soils will be using two (2) CME 45C drill rigs and possibly one Bobcat with auger and bucket. Well installations will be as defined by the design drawings and specifications. All well installations will be closed with either an asphalt mix or concrete.
- 2. Wells anticipated to be drilled include the following:

AI-76, AI-77, AI-78, AI-79, AI-80, AI-81, AI-82, AI-83, VEW-39, VEW-40, VEW-41, VEW-42, PZ-78, PZ-79, PZ-80, PZ-81, PZ-82, PZ-83, PZ-85, and PZ-86.

TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

09300 - Excavations/Footings/Concrete Pads

Monday, November 1, 1993 through Friday, November 12, 1993

- 1. Complete foundation/footer excavation
- Continue and complete footer and foundation wall installation. Major activities 2. include: installation of underground piping sleeves, forming of footings and foundation wall, concrete pouring, and anchor bolt installation.

(C:\WP51\DOCUMENT\MFB8.RPD)



1205

Mr. Don Langshaw November 1, 1993 Page 4

SOIL COVER SYSTEM (ACTIVITY SERIES 10000)

10100 - Initial Subgrade Preparation

Monday, November 1, 1993 through Friday, November 5, 1993

1. Previously grubbed areas will be cleared of all debris, roots and angular rocks.

Areas requiring surface grading will be tolled and smoothed to facilitate adequate drainage during the winter season.

10200 - Stormwater Ditch Upgrade

1. During grading, stormwater drainage channels will be cut directly into grade to allow for adequate drainage during the winter season.

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

Monday, November 1, 1993 through Wednesday, November 3, 1993

1. Using grid previously surveyed in West area, McLaren/Hart personnel will finish layout of exterior well locations for approval and drilling.

Monday, November 1, 1993 through Tuesday, November 2, 1993

1. Continuation of clearing and grading of southwest, west, and east areas. This includes movement of materials by Metaullics Systems from along the road in the southeast corner and the east area of the site. Also, materials located along the west edge of the filters building will need relocated. The remainder of miscellaneous drums must be removed by H&A representatives in order for this clearing to proceed.

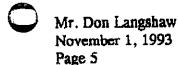
Wednesday, November 3, 1993 through Friday, November 8, 1993

1. Layout of 25' x 25' grid in the southwest and east areas as grading and debris removal finish.

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- 2. Using survey grid, McLaren/Hart personnel will layout exterior well locations in these areas for approval by BP America representatives.
- 3. Survey of underground utilities located by H&A and McLaren/Hart during subsurface investigation.

12300 - Well Placement

Well placement work will continue in the northeast area. The west area will begin after the installation of wells in the northeast area and after the end of the month so as not to interfere with Metaullics' monthly heavy delivery cycle scheduled at the end of the month. All well locations will be or have been approved by a BP America representative prior to drilling.

Anticipated well schedule is as follows:

Monday, November 1, 1993

PZ-2, PZ-3, PZ-1, PZ-4, PZ-7, PZ-10, AI-5, PZ-11, AI-7, and PZ-5.

Tuesday, November 2, 1993

PZ-12, VEW-3, PZ-6, PZ-13, VEW-5, PZ-15, AI-15, PZ-14, PZ-19, and VEW-7.

Wednesday, November 3, 1993

PZ-16, PZ-20, Al-18, PZ-31, PZ-17, VEW-10, PZ-21, AI-23, PZ-18, and AI-24.

Thursday, November 4, 1993

AI-26, AI-28, VEW-11, PZ-32, VEW-12, PZ-22, PZ-25, PZ-34, AI-29, and PZ-24.

Friday, November 5, 1993

PZ-33, VEW-13, AI-30, PZ-26, VEW-14, PZ-23, PZ-27, AI-36, PZ-29, and VEW-17.

Monday, November 8, 1993

AI-34, PZ-28, VEW-16, AI-37, PZ-30, PZ-35, PZ-36, VEW-19, Al-42, and PZ-41.

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Mr. Don Langshaw November 1, 1993 Page 6

Tuesday, November 9, 1993

VEW-21, PZ-38, AI-166, PZ-37, VEW-18, AI-39, AI-165, PZ-40, PZ-43, and VEW-20.

Wednesday, November 10, 1993

AI-40, AI-41, PZ-39, PZ-44, VEW-22, AI-43, AI-46, VEW-25, VEW-23, and PZ-48.

Thursday, November 11, 1993

AI-44, AI-47, PZ-42, VEW-24, PZ-46, AI-45, AI-49, PZ-47, PZ-45, and AI-50.

Friday, November 12, 1993

VEW-26, VEW-27, PZ-49, AI-51, AI-48, PZ-50, PZ-51, AI-55, PZ-52, and AI-52.

Sincerely,

McLAREN/HART

Robert F. DeLisio

Project Engineer

Brian Radus Site Manager

cc:

M. Plautz - McLaren/Hart

M. Doster - NYSDEC

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

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ENVIRONMENTAL ENGINEERING CORPORATION

November 1, 1993

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-4606-B Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB64-93

SUBJECT: BI-

BI-WEEKLY CONSTRUCTION REPORT NO. 2

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 2 covering the period from November 1 to November 14, 1993 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus Site Manager

BDR/dae

Attachments

cc:

K. Andromalos - McLaren/Hart

M. Doster - NYDEC

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

T. Pestica - Carborundum

BI-WEEKLY CONSTRUCTION REPORT NO. 2 PERIOD NOVEMBER 1 - NOVEMBER 14, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

<u>Training (Activity No.01100)</u>: H&A and McLaren/Hart performed on-site training and for new site workers. Building Subcontractor, Apollo Steel, conducted 40 hour, OSHA training for additional workers at an off-site location.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated stored materials in the west field area to permit layout of initial survey grid and well locations in addition material inside the filters building were relocated for weekend work.

Soils Staging Area (Activity No. 03100): Four lined and tarped roll-off containers are being utilized for the temporary staging of soils. The roll-offs are currently located just south of the northeast well field area. One roll-off contains approximately 10-15 cy of >3ppm soil, a second contains approximately 1 cy of <3ppm soil and the fourth container is empty.

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VE, AI and piezometer locations.

<u>Driller Mobilization (Activity No. 04200)</u>: Mobilized one (1) additional trailer mounted propane powered drill rig for the filters building work.

Groundwater Well Installation (Activity No. 04300): Final development of the groundwater wells is scheduled for the week of November 15, 1993.

Excavation/Footings/Concrete Pads (Activity No. 09300): Dug foundation walls, all sides. Poured pile footers, all sides. Poured foundation walls on south, east, west, and half of the north side. Dug foundation for air stripper formed and poured same.

Well Placement - Phase I (Activity Series 12000 & 6000): Performed survey and utility checks in the west well field. Started site preparation/grading of the south and southwest well fields to provide



access for drill rigs. Installed a total of 56 wells in the northeast well field (18 AI wells, 10 VEW wells and 38 piezometers). Installed 19 wells inside filetes building (8 AI wells, 4 VE wells, and 7 piezomters).

Extra Work: The following extra work was performed during this period:

- Completion of stand-by generator installation including auto switch to keep pumps operating in event of power loss.
- Performed split-spoon sampling during VES well installation as directed by H&A.
- Complete an additional APA study.
- 2. <u>Quality Assurance</u>: In addition to the quality assurance activities performed by H&A, McLaren/Hart performed the following additional activities:
 - Prepared twelve (12) concrete cylinders for unconfined compression testing from concrete supplied for footer and foundation pours;
 - Performed head-space analysis on soil samples during drilling operations to assist in the placement of well screens, and
 - Performed soil screen as direct for soil handling to determine primary disposition of soil cuttings.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours (11/01 11/14):

This Period:

2,137 Hours

Total:

3,750 Hours

Without Accident:

790 Hours

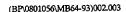
- B. <u>Accident Summary</u>: There were no reportable accidents during this period.
- C. <u>Incident Summary</u>: On Monday, November 8, 1993 Kevin Baumgartner of McLaren/Hart received a small laceration on his





left arm at his wrist. The wound was treated on-site using sterile gauge, antiseptic swabs, and bandaids. Kevin Baumgartner drove himself to the hospital to receive a tenetnus shot which he did. No lost time was encountered as a result of the accident.

- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. An elevated Hnu reading was encountered during PZ-29 installation. The crew doned Level C PPE. Drager tubes were collected to monitor vynal chloride and TCE levels both showed _0 ppm.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling, and Carborundum has been contacted and has approved the locations of McLaren/Hart electrical connection.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Handling of Contaminated Materials: Drill cuttings were screened using a Hnu and segregated according to the 3ppm criteria. The cuttings were transported to a roll-off box. Less than 3ppm material was stored in one box. Greater than 3ppm material was stored in a second box. Currently, drill cuttings are collected to the depth above anticipated existing contamination as determined from previous subsurface investigations. The cuttings are screened using a sample collected from the cutting placed into a glass jar and move into a heated trailer. The samples temperatures are allowed to equalize for a minimum of thirty minutes. Samples are then screened using an Hnu the results are use to determin the temporary staging of the soil.
 - B. <u>Release Summary</u>: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: Three (3) lost days were incurred this period due to inclement weather. The inclement weather also caused slow downs in treatment building production.





Progress Report Page 4

6. Major Issues/Problems/Delays:

The SPDES permit application is on the critical path and will be finalized as soon as McLaren/Hart has received comments from Carborundum and BPA. McLaren/Hart is addressing production issues regarding the Filters Building well install.

B. Other Activities

- 1. <u>Design</u>: McLaren/Hart believes pumping will be required to discharge the water from the treatment plant.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:

RFP was developed for the electric work.

Equipment/Materials Ordered:

- Well Vaults
- Well Covers
- Additional piezometers materials.

4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells - 53

Piezometers - 51

VEW wells - 23

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

1,853 Hours

Total To Date:

3,195 Hours





ATTACHMENT A

BI - WEEKLY CONSTRUCTION REPORT NO. 2 PERIOD NOVEMBER 1 - NOVEMBER 14 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

OSHA/CARBORUNDUM TRAINED WORKERS

COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
•	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
McLaren Hart	Christine A. Retherford	X	X
McLaren Hait	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Donald R. Bigley	X	X
	Ken Andromalos	X	X
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
Empire Soils	Joseph J. Kilcer	X	X
	William L. Levergood	X	X
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X



ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE

44				C gD	
Dr. CO. Britan	SURETRAK			PROGRESS	
DD CONSTRUCTION SCHEDULE		CLEVELAND, OHIO		CRITICAL	
ENTIRONMENTAL ENGINEERING CORPORATION	FINISH DATE 16JUN94	TO MEBICA INC.		MILESTONE	
	DATA DATE 11NOV93	CONSTRUCTION SCHEDULE	DESC	DI	-
	START DATE 09SEP93	SOIL REMEDIATION PROGRAM SANBORN, NEW YORK		LS FLOAT	
McLAREN/HART ENVIRONMENTAL ENGINEERING	RUN DATE 13NOV93	BP AMERICA			
PREPARED BY					
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	SOLL WAPOR TREATHERT SYSTEM	0 24JAN94 T/MAJOS TITLES	39	GROUNDWATER TREATMENT SYSTEM	16000
	GROUNDWARTA TREADMENT BY STEAM		23	GROUNDWATER DISCHARGE PIPING	15000
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	ELECTRICAL SERVICE	1300193,228812757	103 18	SOIL COVER SYSTEM	10000
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ATTACHMENT C

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NY SITE	CHANGE ORDER LOG	DATE	REQUESTED	11,00,03	11/03/33		
SOIL REMEDIATIC			TITLE		Airborne VOC - estimate airborne	VOC concentrations	
			NO.		10		

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ENVIRONMENTAL ENGINEERING CORPORATION

November 12, 1993

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-4606-B Cleveland, OH 44114-2373

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB63-93

SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of November 15, 1993 through November 26, 1993.

GROUNDWATER WELL INSTALLATION (ACTIVITY SERIES 04000)

04300 - Groundwater Well Installation

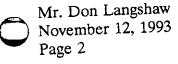
Wednesday, November 17, 1993

1. Development of PW-1 and PW-2 by Empire Soils Investigations

04400 - Temporary Groundwater Piping

1. McLaren/Hart has ordered two (2) well vaults for groundwater wells PW-1 and PW-2. Vault are due to arrive at the site within the next two (2) weeks. Trenching and temporary piping of PW-1 will begin upon placement of the well vaults. Work includes pipe installation, conduit placement, and pressure testing of pipe. McLaren/Hart will procure necessary controls and instrumentation in order to expedite installation. McLaren/Hart may choose to trench across roads on a weekend in order to eliminate traffic problems.





04500 - Groundwater Pump Installation

1. McLaren/Hart has ordered 4 Grundfos submersible pumps as specified in H&A drawing G-1 titled PW-1 and PW-2 Installation (Temporary Piping and Power). The pumps are due to arrive in approximately 1-2 weeks. McLaren/Hart will install pumps and finalize piping immediately after pump delivery.

FILTERS BUILDING WELL PLACE - PHASE 1 (ACTIVITY SERIES 06000)

06300 - VEW AND AI WELL PLACEMENT (WK 3)

Thursday, November 18, 1993

1. McLaren/Hart, Empire Soils, and Metaullics Systems will meet to discuss well locations in the filters building and to identify mechanical equipment that will need relocated.

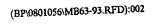
Friday, November 19, 1993

1. Empire Soils crew will begin coring of concrete to expedite drilling work. Coring will begin at approximately 4:00 p.m. and will end by 9:00 p.m. at the latest. In addition, Empire Soils will begin drilling activities on Friday evening.

Saturday, November 20, 1993 through Sunday, November 21, 1993

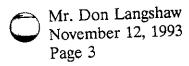
- 1. Drilling inside filters building will commence at approximately 7:30 a.m. McLaren/Hart will hold kickoff meeting and tailgate safety meeting at 7:00 a.m. Empire Soils will be using two (2) CME 45C trailer mounted drill rigs. Well installations will be as defined by the design drawings and specifications. All well installations will be closed with either an asphalt mix or concrete.
- Wells anticipated to be drilled include the following:

AI-83, VEW-41, VEW-42, PZ-85, PZ-84, AI-84, AI-85, PZ-86, AI-86, VEW-43, AI-87, VEW-44, PZ-88, PZ-87, AI-89, AI-90, AI-88, PZ-89, VEW-45, VEW-46, AI-91, PZ-90, and PZ-91.









TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

09300 - Excavations/Footings/Concrete Pads

Monday, November 15, 1993 through Friday, November 26, 1993

- Complete foundation wall/footer excavation
- Continue and complete footer and foundation wall installation. Major activities include: forming of foundation wall, concrete pouring, and anchor bolt installation.
- 3. Begin placement of floor slab stone.
- 4. Form and pour sumps, tank pads, and skid pads.

SOIL COVER SYSTEM (ACTIVITY SERIES 10000)

10100 - Initial Subgrade Preparation

Monday, November 15, 1993 through Friday, November 19, 1993

1. Previously grubbed areas will be cleared of all debris, roots and angular rocks. Areas requiring surface grading will be rolled and smoothed to facilitate adequate drainage during the winter season.

10200 - Stormwater Ditch Upgrade

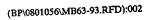
 During grading, stormwater drainage channels will be cut directly into grade to allow for adequate drainage during the winter season.

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

Monday, November 15, 1993 through Friday, November 19, 1993

1. Layout of 25' x 25' grid in the southwest and east areas as grading and debris removal finish.







Mr. Don Langshaw November 12, 1993 Page 4

2. Using survey grid, McLaren/Hart personnel will layout exterior well locations in these areas for approval by BP America representatives.

12300 - Well Placement

Tuesday, November 15, 1993 through Wednesday, November 24, 1993

Well placement work will continue in the west area. After final grading and clearing of the southwest and east areas, well placement will continue. McLaren/Hart is anticipating reduced drilling rates due to adverse weather conditions. We have assumed approximately eight (8) wells will be drilled per day by two track mounted drill rigs. All well locations will be or have been approved by a BP America representative prior to drilling.

McLaren/Hart and Empire Soils have agreed to reduce the amount of drilling activities during the weekend drilling work. There will be no drilling on Monday, November 15, 1993. In addition, drilling activities will be reduced during the week of November 22, 1993. McLaren/Hart will update BP America as to the exact dates of reduced drilling.

Anticipated well schedule is as follows:

Tuesday, November 16, 1993

VEW-23, PZ-46, AI-49, PZ-45, AI-50, VEW-27, PZ-42, and AI-51.

Wednesday, November 17, 1993

PZ-51, AI-55, PZ-52, AI-52, VEW-29, PZ-54, VEW-28, and AI-54.

Thursday, November 18, 1993

PZ-56, PZ-55, AI-61, VEW-31, AI-58, PZ-35, PZ-37, and PZ-43.

Friday, November 19, 1993

AI-40, PZ-44, PZ-39, VEW-22, AI-47, AI-44, VEW-24, and PZ-42.







Mr. Don Langshaw November 12, 1993 Page 5

Monday, November 22, 1993

PZ-47, VEW-26, AI-48, PZ-50, PZ-53, AI-53, VEW-30, and VEW-30.

Tuesday, November 23, 1993

AI-57, PZ-57, PZ-58, VEW-80, PZ-60, AI-60, PZ-59, and AI-59.

Wednesday, November 24, 1993

PZ-61, VEW-79, PZ-63, VEW-32, AI-63, PZ-64, AI-62, and PZ-62.

McLaren/Hart and its subcontractors will not be working on Thursday, November 25, 1993 and Friday, November 26, 1993. At this date, we do not anticipate working over the Thanksgiving weekend.

Sincerely,

McLAREN/HART

Robert F. Derisigdae

Robert F. DeLisio Project Engineer

Brian Radus Jah

Site Manager

cc: M. Plautz - McLaren/Hart

M. Doster - NYSDEC

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

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ENVIRONMENTAL ENGINEERING CORPORATION

November 29, 1993

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-4606-B Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB73-93

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 3

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 3 covering the period from November 15 to November 28, 1993 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus Site Manager

BDR/dae

Attachments

cc:

K. Andromalos - McLaren/Hart

M. Doster - NYDEC

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

T. Pestica - Carborundum

BI-WEEKLY CONSTRUCTION REPORT NO. 3 PERIOD NOVEMBER 15 - NOVEMBER 28, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): H&A and McLaren/Hart performed on-site training and for new site workers.

Materials Relocation (Activity No. 01200): Metaullics personnel material inside the filters building for weekend work.

Soils Staging Area (Activity No. 03100): Five lined and tarped roll-off containers are being utilized for the temporary staging materials. Four roll-offs are currently located just south of the northeast well field area. One roll-off contains approximately 10-15 cy of >20ppm soil, the second and third roll-offs contain approximately 16 cy and 5 cy of <20ppm soil, the fourth roll-off contains approximately >200ppm soil, and the fifth roll-off contains concrete from the filters building and is located west of the office building.

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VE, AI and piezometer locations. H&A is approving well locations prior to drilling.

<u>Driller Mobilization (Activity No. 04200)</u>: Equipment is mobilized to the site as needed to complete the work required.

Groundwater Well Installation (Activity No. 04300): Final development of the groundwater wells is rescheduled for the week of November 29, 1993.

Excavation/Footings/Concrete Pads (Activity No. 09300): Complete pour of the north foundation wall. Removed unsuitable fill from inside foundation wall and replaced with compacted stone. Dug for skid pad placement and placed utility pipe through foundation.

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Co moyoled paper

Well Placement - Phase I (Activity Series 12000 & 6000: Performed survey and utility checks in the west well field. Continued site preparation/grading of the south and southwest well fields to provide access for drill rigs. Installed a total of 43 wells in the northeast well field and inside filters building (15 AI wells, 11 VEW wells and 17 piezometers). Completed well installation inside filters building.

Extra Work: The following extra work was performed during this period:

- Performed split-spoon sampling during VES well installation as directed by H&A.
- Redesign of ex-situ cell due to relocation.
- Complete replies to final APA study comments and submitted same.
- 2. Quality Assurance: In addition to the quality assurance activities performed by H&A, McLaren/Hart performed the following additional activities:
 - Prepared three (3) concrete cylinders for unconfined compression testing from concrete supplied for footer and foundation pours;
 - Performed head-space analysis on soil samples during drilling operations to assist in the placement of well screens, and
 - Performed soil screen as direct for soil handling to determine primary disposition of soil cuttings.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:

A. On-Site Hours:

This Period:

1,547 Hours

Total:

4,963 Hours

Without Accident:

2,295 Hours

B. <u>Accident Summary</u>: There were no reportable accidents during this period.

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Progress Report Page 3

- C. <u>Incident Summary</u>: No incidents.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. An elevated Hnu reading was encountered during AI82 and VEW 46 installation. The crew doned Level C PPE and completed installation.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling, and Carborundum has been contacted.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: Rain delays cause one day loss of work in building and grading tasks this period.
- 6. Major Issues/Problems/Delays:

The SPDES permit application is on the critical path and will be finalized as soon as McLaren/Hart has received comments from Carborundum and BPA. McLaren/Hart is finalizing Ex-Situ treatment cell locations.

Power outages caused 8 hours of down time during filters building work on November 19 and November 20.

B. Other Activities

- 1. <u>Design</u>: McLaren/Hart believes pumping will be required to discharge the water from the treatment plant.
- 2. <u>Permitting</u>: No permits were received during this period.





Progress Report Page 4

3. <u>Procurement</u>: The following procurement activities were performed during this period:

RFP was sent out for filters building trenching and pipe installation

Equipment/Materials Ordered:

No equipment was ordered.

4. <u>Project Controls</u>:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells - 68 Piezometers - 68 VEW wells - 34

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

1,362 Hours

Total To Date:

4.557 Hours

Projected Next Period:

1,700 Hours

(two weeks)

<u>Change Orders</u>: One new change order was discussed during this time period. The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule for the period of November 28, 1993 through December 7, 1993. This detailed schedule will be updated on a weekly basis.

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Progress Report Page 5

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

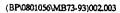
McLaren/Hart will pursue other long lead items during this next period and will followup with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by:

Brian Radus

Construction Site Manager

November 14, 1993







ATTACHMENT A

BI - WEEKLY CONSTRUCTION REPORT NO. 3 PERIOD NOVEMBER 15 - NOVEMBER 28 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK





ATTACHMENT A

BI - WEEKLY CONSTRUCTION REPORT NO. 3 PERIOD NOVEMBER 15 - NOVEMBER 28 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

OSHA/CARBORUNDUM TRAINED WORKERS

COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
McLaren Hart	Christine A. Retherford	X	X
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Donald R. Bigley	X	X
	Ken Andromalos	X	X
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
Empire Soils	William L. Levergood	X	X
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X

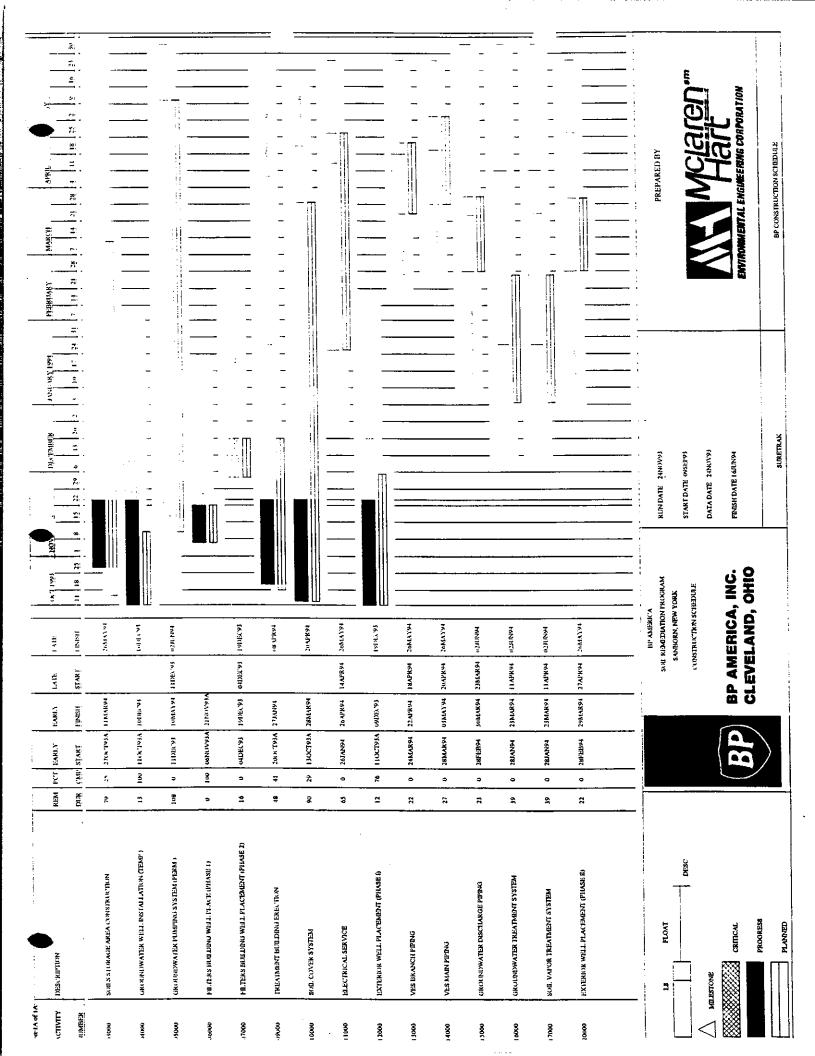




ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE







ATTACHMENT D

TWO WEEK CONSTRUCTION SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE







November 29, 1993

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-4606-B Cleveland, OH 44114-2373

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB74-93

CETTER NO. WID 74-93

SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of November 29, 1993 through December 10, 1993.

GROUNDWATER WELL INSTALLATION (ACTIVITY SERIES 04000)

04300 - Groundwater Well Installation

Tuesday, November 30, 1993

1. Development of PW-1 and PW-2 by Empire Soils Investigations.

04400 - Temporary Groundwater Piping

1. McLaren/Hart has ordered two (2) well vaults for groundwater wells PW-1 and PW-2. Vaults are due to arrive at the site within the next week. Trenching and temporary piping of PW-1 will begin upon placement of the well vaults. Work includes pipe installation, conduit placement, and pressure testing of pipe. McLaren/Hart will procure necessary controls and instrumentation in order to expedite installation. McLaren/Hart may choose to trench across roads on a weekend in order to eliminate traffic problems.

(BP\0801056\MB74-93.RFD)





ENVIRONMENTAL ENGINEERING CORPORATION

December 13, 1993

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB79-93

SUBJECT: **BI-WEEKLY CONSTRUCTION REPORT NO. 4**

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 4 covering the period from November 29 to December 12, 1993 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus Site Manager

BDR/jah

Attachments

CC: K. Andromalos - McLaren/Hart

M. Doster - NYDEC

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

T. Pestica - Carborundum

BI-WEEKLY CONSTRUCTION REPORT NO. 4 PERIOD NOVEMBER 29 - DECEMBER 12, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): H&A and McLaren/Hart performed on-site training and for new site workers.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material around the filters building to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Six lined and tarped roll-off containers are being utilized for the temporary staging materials. Five roll-offs are currently located just south of the northeast well field area. Two roll-offs contain approximately 18-20 cy and 16 cy of >20ppm soil, the third roll-off contains approximately 10 cy of <20ppm soil, the fourth roll-off contains approximately 1.5 cy of >200ppm soil, and the fifth roll-off contains concrete from the filters building and is located west of the office building. The sixth roll-off is empty and will be used for either PPE or >20ppm soil.

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VE, AI and piezometer locations. H&A is approving well locations prior to drilling.

<u>Driller Mobilization (Activity No. 04200)</u>: Equipment is mobilized to the site as needed to complete the work required.

Groundwater Well Installation (Activity No. 04300): Final development of the groundwater wells was complete the week of November 29, 1993.

Excavation/Footings/Concrete Pads (Activity No. 09300): Formed, set steel and poured two sump floors, two skid pads, and one tank foundation.

Well Placement - Phase I (Activity Series 12000 & 6000: Performed survey and utility checks in the South well field. Installed a total of 55 wells in the northeast south well field (19 AI wells, 13 VEW wells and 23 piezometers).



Extra Work: The following extra work was performed during this period:

- Performed split-spoon sampling during VES well installation as directed by H&A.
- 2. Quality Assurance: In addition to the quality assurance activities performed by H&A, McLaren/Hart performed the following additional activities:
 - Prepared three (9) concrete cylinders for unconfined compression testing from concrete supplied for foundation and floor pours;
 - Performed head-space analysis on soil samples during drilling operations to assist in the placement of well screens, and
 - Performed soil screen as direct for soil handling to determine primary disposition of soil cuttings.
 - Complete relative density test for stone place around building foundation and confirm acceptably compaction was achieved using troxler gauge.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

1,802 Hours

Total:

6,765 Hours

Without Accident:

4,097 Hours

- B. <u>Accident Summary</u>: There were no reportable accidents during this period.
- C. <u>Incident Summary</u>: No incidents.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No elevated Hnu readings were encountered.





Progress Report Page 3

- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling, and Carborundum has been contacted.
- 4. Environmental Issues: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. Inclement Weather: Weather was not a factor this period.
- 6. Major Issues/Problems/Delays:

The SPDES permit application is on the critical path and will be finalized as soon as McLaren/Hart has received comments from Carborundum and BPA. McLaren/Hart is finalizing Ex-Situ treatment cell locations.

B. Other Activities

- 1. Design:
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
- 4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells - 87 Piezometers - 91 VEW wells - 47

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

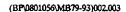
1.602 Hours

Total To Date:

6,159 Hours

Projected Next Period (2 Weeks): 1,600 Hours





Progress Report Page 4

<u>Change Orders</u>: One new change order was discussed during this time period. The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule for the period of December. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart will pursue other long lead items during this next period and will followup with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by:

Brian Radus

Construction Site Manager

December 13, 1993





ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



OSHA/CARBORUNDUM TRAINED WORKERS

COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	X
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Donald R. Bigley	X	X
	Ken Andromaios	X	X
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
Empire Soils	William L. Levergood	X	X
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	. X	X
	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	X	X
	Anthony Mitwick	X	X
Armand Cerrone	Vincent Cerrone	X	X
	Frank Perri	X	X



	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	X	X
	Fred J. Diez	X	X
	Lewis D'Antuono	X	X
	George D. Perry	X	X
	Dave Burns		
Walter J. Johnson	Doug Janeese	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Brian Perry	X	X
Niagara Boundry	Alan W. Slaugenhoupt	X	X
· ·	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	X	X
•	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	\mathbf{X}^{\cdot}	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
Frontier Building	Wayne Zimmerman	X	X
	Michael Kuligsoiski	X	X
Niagara Piping	Steven Bartlet	X	X
Apolla Steel Corp.	Mike Kessler	X	X
	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X
	Albert Black	X	X
	Roy Owens	X	X
	David Sears	X	X



ATTACHMENT B

SUMMARY OF CONSTRUCTION SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE





ATTACHMENT C

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

	SOIL REMEDIAT	TON/GROUNDWA SANBORN, N	REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NY SITE	
		CHANGE ORDER LOG	ER LOG	
NO.	TITLE	DATE REQUESTED	COMMENTS	STATUS
01	Relocate treatment building	7/21/93		Complete
05	Existing GRS instrument/electrical	7/21/93	McLaren/Hart to submit cost estimation.	In progress
03	Filters building valving relocation	7/21/93	McLaren/Hart to submit cost estimation.	In progress
04	Groundwater pretreatments	7/21/93	McLaren/Hart to submit cost estimation.	In progress
05	Ex-situ cell relocation	7/21/93	McLaren/Hart will not charge for work involved with the Ex-situ cell.	Complete
90	Sales tax exemption	9/3/93	McLaren/Hart to submit cost estimation.	In progress
07	Tara vac well closure	10/13/93		Complete
08	Emergency generator	10/15/93		Complete
60	Split spoon sampling	10/15/93	A sur A Charleston May 1	Ongoing
10	Out flow redesign	10/21/93		Ongoing
11	Delay due to power failure 11/19-11/20	12/15/93	McLaren/Hart working compiling cost total.	Complete
12	Temporary groundwater well installation	12/17/93	For equipment and material that will not be used during operation.	In progress

Mr. Don Langshaw December 13, 1993 Page 2

04500 - Groundwater Pump Installation

Thursday, December 13, 1993 through Friday, December 24, 1993

1. Four (4) Grundfos submersible pumps as specified in H&A drawing G-1 titled *PW-1 and PW-2 Installation (Temporary Piping and Power)* have arrived on site for installation by McLaren/Hart. McLaren/Hart will install pumps and associated piping as well vaults are placed.

TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

<u>09300 - Excavations/Footings/Concrete Pads</u>

09400 - Building Erection

09600 - Floor Slab Construction/Curing

Monday, December 13, 1993 through Friday, December 24, 1993

- 1. Finalize erection of steel building, frame door openings, install doors, and finish sheeting.
- 2. Finalize installation of underground conduit and steel reinforcement for floor slab.
- 3. Pour concrete floor slab within building.
- 4. Form and pour equipment pads.

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

Wednesday, December 13, 1993 through Friday, December 17, 1993

1. Layout of 25' x 25' grid in the east area as all underground utilities are located.

(BP\0801056\MB78-93.RFD)







ENVIRONMENTAL ENGINEERING CORPORATION

December 28, 1993

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB84-93

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 5

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 5 covering the period from December 13, 1993 to December 26, 1993 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Site Manager

BDR/jah

Attachments

cc:

K. Andromalos - McLaren/Hart

M. Doster - NYDEC

D. Hagen - Haley & Aldrich.

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

T. Pestica - Carborundum

BI-WEEKLY CONSTRUCTION REPORT NO. 5 PERIOD DECEMBER 13 - DECEMBER 12, 1993 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): H&A and McLaren/Hart performed on-site training and for new site workers.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material around the filters building to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Eight lined and tarped roll-off containers are being utilized for the temporary staging materials.

ROLLOFF	CONTENTS	QUANTITY
1	Concrete	5 cy
1	PPE	10 cy
5	>20ppm	~ 100 cy
1	>200ppm	1.5 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VE, AI and piezometer locations. H&A is approving well locations prior to drilling.

Temporary Groundwater Well Hook up: Wells PW1 and PW2 were completed and operational on December 23, 1993.

Conduit & Piping Placement, Floor Slab Construction, Interior Room Construction (Activity No. 09500, 09600, 09650): Formed, set steel and poured the floor inside the treatment building. Formed and erected enclosure for the outside pad. The building is being heated to allow for proper curing of the concrete.

Began construction of blower room, complete electrical conduit for equipment.





- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No elevated Hnu readings were encountered.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling, and Carborundum has been contacted.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather:</u> Weather did not cause work delays.
- 6. <u>Major Issues/Problems/Delays</u>:

The SPDES permit application is on the critical path and will be finalized as soon as McLaren/Hart has received comments from Carborundum and BPA. McLaren/Hart is responding to the comments by Haley and Aldrich concerning the filters building work plan.

B. Other Activities

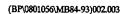
- 1. <u>Design</u>: McLaren/Hart is currently investigating the possibility of installing VES piping above ground.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
- 4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells 103
Piezometers 106
VEW wells 52







Progress Report Page 4

<u>Manpower Summary</u>: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period: 1,394 Hours Total To Date: 7.553 Hours

Total To Date: 7,553 Hours
Projected Next Period: 1,400 Hours

(2 Weeks)

<u>Change Orders</u>: One new change order was discussed during this time period. The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule for the period of December. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart will pursue other long lead items during this next period and will followup with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by:

Brian Radus

Construction Site Manager

December 28, 1993





ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



OSHA/CARBORUNDUM TRAINED WORKERS

COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	x
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Donald R. Bigley	X	X
	Ken Andromalos	X	X
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
Empire Soils	William L. Levergood	X	x
_	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X
	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	X	X
	Anthony Mitwick	X	X





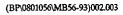
Armand Cerrone	Dave Burns	X	X
	Vincent Cerrone	X	X
	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	X	X
	Fred J. Diez	X	X
	Lewis D'Antuono	X	X
	George D. Perry	X	X
Walter J. Johnson	Doug Janeese	X	X
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
•	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
•	Salvatore A. Nasca	X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
	Robert Boland	X	X
	Ronald Hillman	X	X
	Bob Green	X	X
	Ray Mosci	\mathbf{X}	X
	Steve Chulli	X	X
	Rick Johnson	X	X
	Brian Perry	X	X
Niagara Boundry	Alan W. Slaugenhoupt	X	X
	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	X	X
	Dan Kroening	X	X



	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
Frontier Building	Wayma 7:	,	
- 10mior Banding	Wayne Zimmerman	X	X
	Frank P. Tedesco	·X	X
	Michael Kuligsoiski	X	X
Niagara Piping	Steven Bartlet	X	X
Apolla Steel Corp.	Mike Kessler	X	Х
	Wesley Pokelwaldt	X	X
	Robert Fiori	X	
	Albert Black	X	X
	Roy Owens	X	X
	David Sears	X	X X
CIR	Jeff Haseley	v	
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
	Larry Kineger	X	X
J.W. Danforth	Peter Reagan	X	Х
	Tom Reagan	X	X
		1.2	Λ



ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE







Sheet 1 A of 1 A			-	-					
		REM	PCT EARLY		EARLY	LATE LATE	EX TE	OCT 1993 NOW	DECEMBER JANUARY SSA FERRUARY MARCH APPL NATURE
ACHAILT	DESCRIPTION	_	CMP START				FINISH	11 18 25 1 8 15	5 22 29 6 13 20 27 3 10 17 24 11 7 14 21 28 7 14 21 20 4 11 18 22 2 9 16 22 30 6 13
03000	SOILS STORAGE AREA CONSTRUCTION		41 270	- X	7APR94		07JUN94		\$7000
04000	GROUNDWATER WELL INSTALLATION (TEMP.)	•	— <u>>11</u>	100 11OCT93A 22DEC93A	2DEC93A	_			GROUNDWATER WELL INSTALLATION (TEMP.)
08000	GROUNDWATER PUMPING SYSTEM (PERM.)	121	0	23DEC93 1-	14JUN94 11DEC93 14JUN94	11DEC93	14,TUN94		GROCHIDWAITE PUNCHOG STEETEN (PERA)
00090	FILTERS BUILDING WELL PLACE (PHASE 1)	°	<u>8</u>	06NOV93A 21NOV93A	INOV93A		<u></u>		ELITERS BUILDING WILL PLACE OHACE 1)
07000	FILTERS BUILDING WELL PLACEARINT (PHASE 2)	2	- 23	23DEC93 1	187AN94	04DEC93	19DEC93		FILTERS BUILDING WELL PLACEMENT OF MARE?
00060	TREATMENT BUILDING ERECTION	22	27	200CT93A 26/AN94	26JAN94		20APR94	**************************************	TREATMENT DATE FRECTION
10000	SOIL COVER SYSTEM	2	42	130CT93A 22APR94	22APR94		02MAY94	7	SCL CVFR SF3FM
11000	ELECTRICAL SERVICE	22	0 20	26JAN94 23MAY94 26AFR94	23MAY94	26APR94	97JUN94		PLECTRICAL SERVICE
12000	EXTERIOR WELL PLACEMENT (PHASE I)	-	8 2	110CT93A 23DEC93	23DEC93		19DEC93		EXTERIOR WELL PLACEMENT OPPACED
13000	VES BRANCH PIPING	22		20APR94	19MAY94 28APR94	18APR94	07.EUN94	•	VIZ BRANCH PIDNG
14000	VES MAIN PEING	27	- 8	22APR94	30MAY94 02MAY94	озмачя	0730394	*	VES MAN POPUS
00051	GROUNDWATER DISCHARGE PEING	ล		25MAR94	26APRS4 04APRS4	OAAPRSA	14103094	*	GROUNDWATER DECIMAGE PPING
16000	GROUNDWATER TREATMENT SYSTEM			27JAN94	22MAR94	22MAR94 21APR94	14ANN94	¥	GROUNDWATER TREATMENT SYSTEM
17000	SOIL VAPOR TREATMENT SYSTEM	- 30		273AN94	22MAR94	22MAR94 21APR94	14JUN94	*	SOL VAPOR TREATMENT SYSTEM
20000	EXTERIOR WELL PLACEMENT (PHASE II)	81	-	20DEC93A, 20JAN94	20JAN94		97JJN94	EXTERIOR WELL	PLACEMENT ORINGE IN
		_	_			_	_		
	LS RIOAT					Ş	II. REMĒ	BP AMERICA SOIL REMEDIATION PROGRAM	RUN DATE 21DEC93
	DESC					1	SANB	SANBORN, NEW YORK	START DATE 09SEP93
\leq	MILESTONE					~	CONSTRU	UCTION SCHEDULE	DATA DATE 23DEC93
	CRITICAL			E		90	BP AMER	BP AMERICA, INC.	FINISH DATE 28/UN94 ENVRONMENTAL ENGINEERING CORPORATION
	PROGRESS DI ANNED								SURETRAK BP CONSTRUCTION SCHEDULE
	LLANNED								

ATTACHMENT C CHANGE ORDER LOG

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



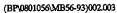


ATTACHMENT C SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

1

	SOIL REMED	ATION/GROUNDWA SANBORN, N	SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NY SITE	
		CHANGE ORDER LOG	JER LOG	
NO.	TITLE	DATE REQUESTED	COMMENTS	STATUS
10	Relocate treatment building 063	7/21/93		Complete
02	Existing GRS instrument/electrical	7/21/93	McLaren/Hart to submit cost estimation.	In progress
03	Filters building valving relocation 674	4 7/21/93	McLaren/Hart to submit cost estimation.	In progress
8	Groundwater pretreatments	7/21/93	McLaren/Hart to submit cost estimation.	In progress
90	Ex-situ cell relocation 00A	7/21/93	McLaren/Hart will not charge for work involved with the Ex-situ cell.	Complete
90	Sales tax exemption	9/3/93	McLaren/Hart to submit cost estimation.	In progress
20	Tara vac well closure 064	4 10/13/93		Complete
80	Emergency generator 665	5 10/15/93		Complete
60	Split spoon sampling	10/15/93		Ongoing
10	Out flow redesign 671	1 10/21/93		Ongoing
11	Delay due to power failure 073	3 12/15/93	McLaren/Hart working compiling cost total.	Complete
12	Temporary groundwater well installation	12/17/93	For equipment and material that will not be used during operation.	In progress

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE









ENVIRONMENTAL ENGINEERING CORPORATION

December 20, 1993

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056

SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB82-93

SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of December 20, 1993 through December 31, 1993.

GROUNDWATER WELL INSTALLATION (ACTIVITY SERIES 04000)

04500 - Groundwater Pump Installation

Monday, December 20, 1993 through Wednesday, December 23, 1993

1. Four (4) Grundfos submersible pumps have arrived on site and will be installed as specified in H&A drawing G-1 titled PW-1 and PW-2 Installation (Temporary Piping and Power). In addition, interior well vault piping, control systems, and electrical power supply will be installed and tested.

Wednesday, December 23, 1993 through Thursday December 24, 1993

1. Start-up and testing of groundwater pumping system by McLaren/Hart.

TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

McLaren/Hart and its building subcontractors will not work on the following days due to the Christmas and New Year holidays:

Monday, December 27, 1993 Friday, December 31, 1993 Monday, January 3, 1994

(BP\0801056\MB82-93.RFD)

Mr. Don Langshaw December 20, 1993 Page 2

09300 - Excavations/Footings/Concrete Pads

09400 - Building Erection

09600 - Floor Slab Construction/Curing

09650 - Interior Room Construction

Monday, December 20, 1993 through Thursday, December 30, 1993

- 1. Finalize erection of steel building, frame door openings, and install doors.
- 2. Pour final section of concrete floor slab within building.
- Form and pour equipment pads.
- 4. Begin placement of masonry block.
- Form and pour exterior concrete pads and ramps.

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

Monday, December 20, 1993 through Wednesday, December 22, 1993

- 1. Layout of 25' x 25' grid in the east area as all underground utilities are located by BP America.
- 2. Using survey grid, McLaren/Hart personnel will layout exterior well locations in these areas for approval by BP America representatives.

12300 - Well Placement

Monday, December 20, 1993 through Thursday, December 23, 1993

Well placement work will continue in the southwest and east areas. McLaren/Hart is anticipating reduced drilling rates due to adverse weather conditions. We have assumed approximately four (4) wells will be drilled per day by one track mounted drill rig. During the remaining week before Christmas, Empire Soils will have only one rig and crew. No drilling will occur between the Christmas and New Year holidays. All well locations will be or have been approved by a BP America representative prior to drilling.

(BP\0801056\MB82-93.RFD)



Anticipated well schedule is as follows:

Monday, December 20, 1993

PZ-136, VEW-67, AI-107, and AI-112.

Tuesday, December 21, 1993

AI-111, PZ-129, AI-136, and AI-135.

Wednesday, December 22, 1993

AI-126, VEW-66, PZ-128, and VEW-65.

Thursday, December 23, 1993

AI-105, PZ-135, AI-110, and AI-119.

Sincerely,

McLAREN/HART

Robert F. Delisio Jah Robert F. DeLisio

Project Engineer

Brian Radus Site Manager

cc:

M. Plautz - McLaren/Hart

M. Doster - NYSDEC

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

(BP\0801056\MB82-93.RFD)



ATTACHMENT E PROCUREMENT SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE







		PROCESS EQUIPMENT SCHEDULE	NT SCHEDULE						- 000
				PBO. IECT NO.	09-0801056-001		SSUE DATE		Aug 11, 1985
LOCATION	BP AMERICA, INC. CARBORUNDUM FACILITY	<u>ITTY</u>		PREP. BY	S.O.F.		REV. DATE REV. NO.	3	266
PLANT TYPE	Wheameld, New Tolk Soll Remed,/GW Treatment Pro	ment Proj.		,			No divide	FANTIME	ORDERDATE
	NECODIDITION	SIZE	TYPE	MANUFACTURER	MODEL NO.	EMPTY/FULL WEIGHT // BS 1	HF/V/hr.m	0.0000	
W0	DESCRIPTION OF THE PROPERTY OF				AA_0117		1/8/110/1575		294
01 0 4 E 1	Pump Samo Pump	27° Hg vac	Shaded Pole	Gast Mfg. Corp.	HOM-VIII				12-10-93
7-001-4-5	Vaccing Blower	Г		Roots Dresser	616 000				12-10-93
P-/01A-U	Vaccioni Diomer	200	Positive Displacement	Roots Dresser	615-FAI-0			4-6 weeks	12-10-93
8-901,2,3,4	Air maction chows	-	N/A	Wessels	N/A	40E he		B-8 weeks	12-10-93
U-701	All/Water Sepanato	Γ	Inline	Stoddard Silencers	F65-14	T	NA		12-10-93
F-701	Particulate Filter	Τ	Inline	Stoddard Silencers	F8-13/		N/A	4-6 weeks	12-10-93
F-702	Particulate Filler	T	WaterCooled	Xchanger Inc.	C-375	٤.	NA	Г	3-94
H-701	Venor Phase Carbon	12,500 lbs	Activated	Calgon	Vapor Pac 10				
301101-0A	125		Carbon		7 03000	146 lbs.	5/460/3500	1 week	RECEIVED
4,00	OM Wall Dump	100 GPM @ 140' TDH	Submersible	Grundfos Pumps	80330		3/460/3500		11-18-93
F-801A,6	diam real control				60330-3	146 lbs	3/460/3500	1 week	RECEIVED
		HUL WE SHOW	Submersible	Grundfos Pumps	60830-5		1 5/450/3500		11-18-93
P-802-AB	GW Well Fump	HOLDER & SECTION			25515-9	400 154	7 5/460/1750	6-8 weeks	12-20-93
	3.	20 CP W W 120 CP	Contribus	Aurora	Series 3x4x8		1.00 t/00 t/0.1	Į	
P-803A,B,C	Filter Feed Pumps	ZOU GEM G	TA THE PARTY OF TH				419193011750	6-8 weeks	12-20-93
	1	71 FT 100	O. honoreihlo	Aurora	OSP33		1/2/2/1/		
P-804A.B	Bldg Sump Pumps	15 GPM (Q)					SMENHANN	6-8 weeks	12-20-93
		25 F1 10H	Contrifuce	Aurora	3'x4'x8"		2001/004/0		
P-805A,B,C	S-801B Pumps	200 Grm G			Series 350		10/460/1800	6-8 weeks	12-20-93
	1	35.1 FT 1.DT	Centrifugal	Aurora	2'x3'x10'		201/004/01		
P-806A,B,C	GAC Feed Pumps	404 B TOTA	8		Series 350	1900	1/3/460/1750	6-8 weeks	12-20-93
		20 GPM @	Centrifugal	Aurora	324		201/201/201		
P-807	A/W Sep. rump	40 Et TOH						2 weeks	2-94
0	Cham Feed Pump	0.1-1 GPH	Diaphragm	LWI	141-1556				000
000		10000	Metering	Snyder	5130-40		N/A	3 жөөкз	12-23-33
T-801	Equalization Tank	7.5 Ft. Diam	Closed Top		5480-40		N/A	3 weeks	12-23-93
T-802	Effluent	4,900 Gal	Vertical	Snyder			77.7	6 weeks	12-23-93
	Tank	100 microns	20000	Pienty Products inc.	5. BFA-S-150-6-C5	/60 lbs.			
F-101 A,B	010111-014	Ko miorone	; -			- S	1 5/230/1800	6 weeks	12-23-93
F-102A,B	Pto-Filtors	Silving Cook		New York Blower	152KB	3000			
B-801A,B	Air Stripper	1.5 HP		2		1050 lbs.	A/A	6 weeks	12-23-93
0 4100	Air Stinner	5 ft Diam.		Magnum Plastics					
a't 1001 5	Towers	25 ft. ht.					5	8-10 weeks	12-23-93
1	Of the second	10 000 ths.	Activated	Calgon Carbon	7.5	SZUOUJOOUSE Iba			
LC-801A,B	Carbon Unit	7.5 ft. Diam.	Carbon						ı



ENVIRONMENTAL ENGINEERING CORPORATION

January 10, 1994

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB94-94

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 6

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 6 covering the period from December 27, 1993 to January 9, 1994 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HABI

Brian D. Radus

Construction Manager

BDR/jah

Attachments

cc:

K. Andromalos - McLaren/Hart

M. Doster - NYDEC

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

A. Hastee - Carborundum

BI-WEEKLY CONSTRUCTION REPORT NO. 6 PERIOD DECEMBER 27, 1993 - JANUARY 9, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): H&A and McLaren/Hart performed onsite training and for new site workers.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material around the filters building to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Eight lined and tarped roll-off containers are being utilized for the temporary staging materials.

ROLLOFF	CONTENTS	QUANTITY
1	Concrete	5 cy
1	PPE	10 cy
5	>20ppm	⁻ 100 cy
1	>200ppm	1.5 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VE, AI and piezometer locations. H&A is approving well locations prior to drilling.

Temporary Groundwater Well Hook up: Fines from the well caused problems with the flow meter. Both wells were developed to remove any remaining fines. The damaged flow meter was replaced. Both wells are operational.

Conduit & Piping Placement, Floor Slab Construction, Interior Room Construction (Activity No. 09500, 09600, 09650): Finished pour of all remaining equipment pad inside building. Completed pour of last outside concrete pad.



Completed construction of blower room, began installation of the inside lighting. Expect to be substantially complete with treatment building by January 21, 1994

Well Placement - Phase I (Activity Series 12000 & 6000: Performed utility checks in the South well field. Installed a total of 10 wells in the south well field (5 AI wells, 0 VEW wells and 5 piezometers).

Extra Work: The following extra work was performed during this period:

- Performed split-spoon sampling during VES well installation as directed by H&A.
- 2. <u>Quality Assurance</u>: In addition to the quality assurance activities performed by H&A, McLaren/Hart performed the following additional activities:
 - Prepared three (3) concrete cylinders for unconfined compression testing from concrete supplied for floor and equipment pad pours.
 - Performed head-space analysis on soil samples during drilling operations to assist in the placement of well screens.
 - Performed soil screen as direct for soil handling to determine primary disposition of soil cuttings.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:

A. On-Site Hours:

This Period:

942 Hours

Total:

9,317 Hours

Without Accident:

6,649 Hours

- B. <u>Accident Summary</u>: There were no reportable accidents during this period.
- C. Incident Summary: No incidents.
- D. OSHA/Carborundum Trained Site Workers: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.





- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No elevated Hnu readings were encountered.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather:</u> Weather did not cause work delays.
- 6. Major Issues/Problems/Delays:

The SPDES permit application is on the critical path and will be finalized as soon as McLaren/Hart has received comments from Carborundum and BPA. Delayed Filters Building work until January 13, 1994 if outstanding issues can be resolved.

B. Other Activities

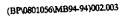
- Design: McLaren/Hart is currently investigating the possibility of installing VES piping above ground.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
- 4. Project Controls:

<u>Schedule Update</u>: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells 108
Piezometers 111
VEW wells 52





Progress Report Page 4

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

782 Hours

Total To Date:

8,335 Hours

Projected Next Period:

1,200 Hours

(2 Weeks)

<u>Change Orders</u>: One new change order was discussed during this time period. The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule for the period of December. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart is reviewing proposals for electrical subcontractors and expects to award contract by January 14, 1994. McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by:

Brian Radus

Construction Manager

January 10, 1994





ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

(BP\0801056\MB56-93)002.003



Anayolea pa

OSHA/CARBORUNDUM TRAINED WORKERS

COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
	a I Doule	X	X
Haley & Aldrich	Susan L. Boyle Dave Nostrant	X	X
	Brenda G. Hanna	X	X
		X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	•-	
	Christine A. Retherford	X	X
McLaren Hart	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Donald R. Bigley	X	X
	Ken Andromalos	X	X
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
			17
Empire Soils	William L. Levergood	X	X X
Empire done	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X
	Alan Przywara	X	
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	X	X
	Anthony Mitwick	X	X
	Anthony Manne		

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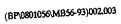
		X	X
	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	Λ	
		X	X
Frontier Building	Wayne Zimmerman	X	X
	Frank P. Tedesco	X	X
	Michael Kuligsoiski	Λ.	
	Staven Bartlet	X	X
Niagara Piping	Steven Bartlet		
	Mike Kessler	X	. X
Apolla Steel Corp.	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X
	Albert Black	X	X
		X	\mathbf{X}_{\cdot}
	Roy Owens David Sears	X	X
•		x	X
CIR	Jeff Haseley	X	X
	Charlie Carr	· X	X
	Paul Kloosterman	X	X
	Larry Krueger	Λ	
		X	X
J.W. Danforth	Peter Reagan	X	X
- ' '	Tom Reagan	Λ	

Tom Reagan

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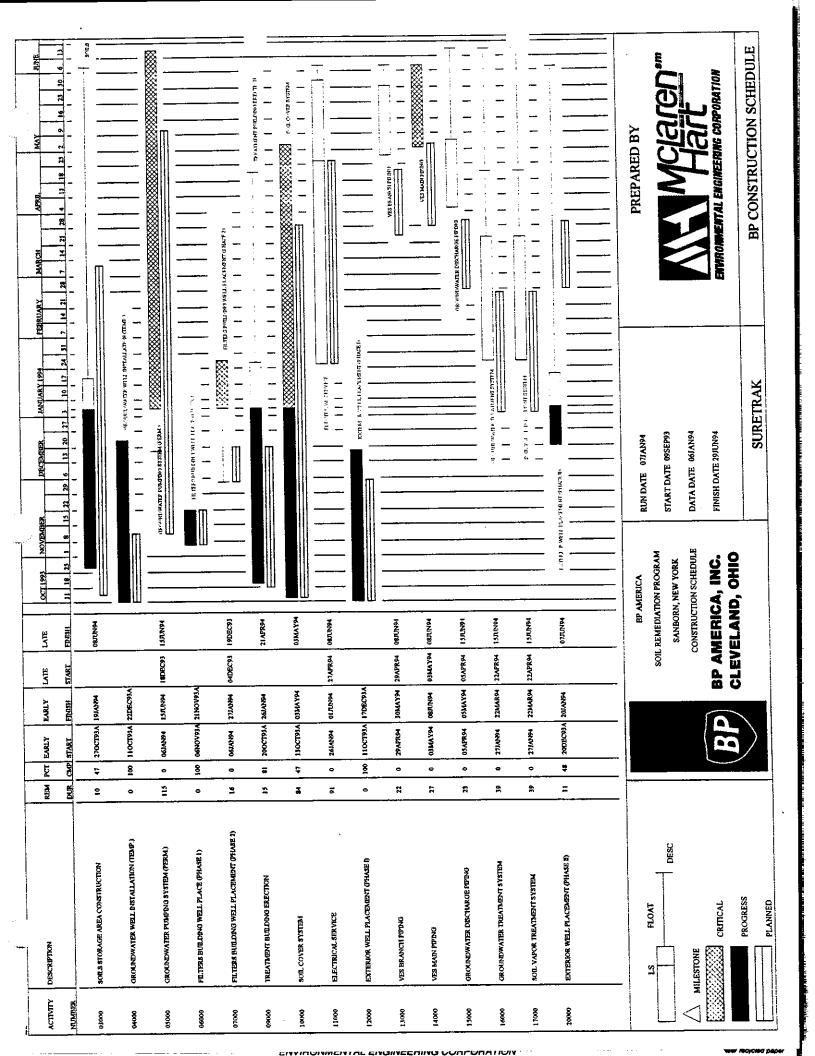


ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE









ATTACHMENT C CHANGE ORDER LOG SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

(BP\0801056\MB56-93)002.003



ATTACHMENT C SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

	SOIL REMEDIAT	TON/GROUNDWATER TREAT	EMEDIATION/GROUNDWATER TREATMENT PROJECT	
		CHANGE ORDER LOG	ER LOG	
NO.	TITLE	DATE REQUESTED	COMMENTS	STATUS
01	Relocate treatment building	7/21/93		Complete
03	Existing GRS instrument/electrical	7/21/93	McLaren/Hart to submit cost estimation.	In progress
03	Filters building valving relocation	7/21/93	McLaren/Hart to submit cost estimation.	In progress
04	Groundwater pretreatments	7/21/93	McLaren/Hart to submit cost estimation.	In progress
05	Ex-situ cell relocation	7/21/93	McLaren/Hart will not charge for work involved with the Ex-situ cell.	Complete
90	Sales tax exemption	9/3/93	Proceed according to MB30-93 letter.	In progress
07	Tara vac well closure	10/13/93	To be billed next invoice.	Complete
80	Emergency generator	10/15/93	To be billed next invoice rental and relay installation.	Complete
60	Split spoon sampling	10/15/93		Ongoing
10	Out flow redesign	10/21/93		Ongoing
11	Delay due to power failure 11/19-11/20	12/15/93	McLaren/Hart working compiling cost total.	Complete
12	Temporary groundwater well installation	12/17/93	For equipment and material that will not be used during operation. McLaren/Hart compling costs.	In Progress
13	Standby rate Level B equipment for Filters Building upgrade	1/7/94	Will use rates supplies with original proposal and subcontractor quote and provide cost estimation.	In Progress
14	Additional air pathway analysis		McLaren/Hart will drop this from future reports as no charges will be submitted to BPA.	No Charge

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

(BP\0801056\MB56-93)002.003





January 7, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB93-94 SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of January 10, 1994 through January 23, 1994.

SOILS STORAGE AREA CONSTRUCTION (ACTIVITY SERIES 03000)

03200 - Ex-Situ Cell Construction

Monday, January 10, 1994

- 1. Finish placement of ex-situ cell walls.
- 2. Place remaining portions of Reef Industries liner.

FILTERS BUILDING WELL PLACEMENT - PHASE 2 (ACTIVITY SERIES 07000)

07100 - Floor Trenching/Piping/Restoration (WK 1)

Tuesday, January 11, 1994

McLaren/Hart and Haley & Aldrich will meet with Metaullics Systems to identify areas that will need to be cleared for trenching activities to commence.

Wednesday, January 12, 1994 through Thursday, January 13, 1994

McLaren/Hart will lay out the anticipated trench boundaries for subsequent saw cutting. The boundaries will be marked with paint and/or chalk.

Thursday, January 13, 1994

Beginning at 3:30 pm, McLaren/Hart and its subcontractor will begin saw cutting of previously marked trenches.

Friday, January 14, 1994 through Sunday, January 16, 1994

Beginning at 3:30 pm on Friday, McLaren/Hart and its subcontractors will begin concrete removal, trenching, piping, and backfilling as outlined in the *Revised Filters Building Work Procedures* submitted to BP America by McLaren/Hart.

07200 - Floor Trenching/Piping/Restoration (WK 2)

Tuesday, January 18, 1994

McLaren/Hart and Haley & Aldrich will meet with Metaullics Systems to identify areas that will need to be cleared for trenching activities to commence.

Wednesday, January 19, 1994 through Thursday, January 20, 1994

McLaren/Hart will lay out the anticipated trench boundaries for subsequent saw cutting. The boundaries will be marked with paint and/or chalk.

Thursday, January 20, 1994

Beginning at 3:30 pm, McLaren/Hart and its subcontractor will begin saw cutting of previously marked trenches.

Friday, January 21, 1994 through Sunday, January 23, 1994

Beginning at 3:30 pm on Friday, McLaren/Hart and its subcontractors will begin concrete removal, trenching, piping, and backfilling as outlined in the *Revised Filters Building Work Procedures* submitted to BP America by McLaren/Hart.





TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

09650 - Interior Room Construction

Monday, January 10, 1994 through Friday, January 21, 1994

- 1. Complete interior room construction and finalize installation of all interior doors.
- 2. Finish installation of electrical conduit and wiring for treatment plant lighting. In addition, all fixtures, outlets, and lights will be placed and wired.
- 3. Sound proofing will be installed on blower room walls.
- 5. Finish curing of exterior/interior concrete ramps and pads.
- 6. Final grade access road and parking area.

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

1. Using survey grid, McLaren/Hart personnel will layout exterior well locations in the east and courtyard areas for approval by BP America representatives.

12300 - Well Placement

Monday, January 10, 1994 through Friday, January 21, 1994

Well placement work will continue in the southwest and east areas.

McLaren/Hart is anticipating reduced drilling rates due to adverse weather conditions. We have assumed approximately four (4) wells will be drilled per day by one track mounted drill rig. During the remaining drilling, Empire Soils will have only one rig and crew. All well locations will be or have been approved by a BP America representative prior to drilling.



Anticipated well schedule is as follows:

Monday, January 10, 1994

AI-93, PZ-154, VEW-60, and AI-94.

Tuesday, January 11, 1994

AI-96, PZ-153, AI-95, and PZ-147.

Wednesday, January 12, 1994

VEW-61, PZ-146, AI-99, and AI-98.

Thursday, January 13, 1994

VEW-62, AI-105, VEW-65, and AI-111.

Friday, January 14, 1994

PZ-128, VEW-66, PZ-129, and AI-126.

Monday, January 17, 1994

VEW-72, AI-136, AI-135, and AI-127.

Tuesday, January 18, 1994

PZ-93, AI-153, VEW-47, and PZ-92.

Wednesday, January 19, 1994

AI-152, PZ-95, AI-150, and PZ-94.

Thursday, January 20, 1994

AI-151, VEW-48, PZ-98, and AI-149.



Friday, January 21, 1994

AI-148, PZ-97, VEW-49, and PZ-151.

Sincerely,

McLAREN/HART

Robert F. DeLisio

Project Engineer

Brian Radus Site Manager

cc: M. Plautz - McLaren/Hart

M. Doster - NYSDEC

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

J. Parker - McLaren/Hart

L. Rogozinski - MK Environmental

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart





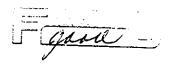
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FAX

Penn Center West III, Suite 106 -- Pittsburgh, Pennsylvania 15276 Phone (412)-787-7144 -- Fax (412)-787-7218

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ATTACHMENT E PROCUREMENT SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

(BP\0801056\MB56-93)002.003



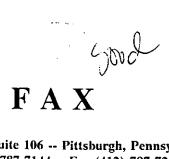
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P-801, 2,4,5,10 P-701A-D LOCATION P-807 F-702 U-701 F-701 PLANT TYPE P-803A,B,C P-809 P-808 P-806A,B,C P-804A,B 3-901,2,3,4 /C-701,702 E-601 B-801A, B T-801 LC-801A,B S-801A,B 901A,B -802 -805A,B,C -σ02-A,B 1 A,B Particulate Filter Perticulate Filter Soil Remed./GW Treatment Proj. CARBORUNDUM FACILITY BP AMERICA, INC. Wheatfield, New York Heat Exchanger Air Injection Blower
Air/Water Separator Vacuum Samp, Pump Pre-Filters Pre-Filters GW Well Pump GW Well Pump Vapor Phase Carbon Vacuum Blower S-801B Pumps Bldg Sump Pumps Chem. Feed Pump GAC Food Pumps Filter Feed Pumps Air Stipper Tank Effluent Equalization Sewage Lift Pump A/W Sep. Pump ₽. Air Stripper Carbon Unit Liquid Phase Towers Š DESCRIPTION ompressor PROCESS EQUIPMENT SCHEDULE 71 Ft TDH 15 GPM @ 60 GPM @ 130' TDH 50 GPM @ 130' TDH 3,000 Gal 200 GPM @ 26 GPM @ 180'TDH 50 microns 2000 scfm 50 GPM @ 20 GPM @ 35.1 Ft TDH 200 GPM @ 100 GPM @ 140' TDH 7.5 Ft. Diam 200 GPM @ 25 FT TOH 10 Ft TDH 104.8 Ft TDH 44.0 CFM @ 25 ft. ht. 5 ft Diam. 4,900 Gal 600 GPM 00 microns 175 PSIG 7.5 ft. Diam 10,000 lbs. .5 平 .5 Ft. Diam 000 cfm, 5 psig 50 microne 9316 CFM 100 gallons 27" Hg vac 12,500 lbs 1100 cfm \$17.E Submersible Metering Submersible Submersible Activated Water Cooled inline Inline Positive Displacement Shaded Pole Carbon Vertical Vertical Centrifugal Centrifugal Carbon Centrifugal Submersible Closed Top Closed Top Diaphragm Centrifugal Air Cooled Activated Reciprocating Roots Dresser Aurora Gast Mfg. Corp. Stoddard Silencers Stoddard Silencers Zoeller Grundfos Pumps Calgon Vessels Roots Dresser Aurora Aurora Aurora Aurora Grundfos Pumps (changer inc. Magnum Plastics Plenty Products inc. Snyder ₹ PROJECT NO. Gardner Denver Calgon Carbon New York Blower MANUFACTURER S.O.F. Series 350 324 80\$30-5 60\$30-5 F8-137 09-0801056-001 Series 350 2"x3"x10" C-375 615-RAI-U 616 DVJ ROA-V110-AA BFA-S-150-6-C5 5480-40 5130-40 3"x4"x8" OSP33 Series 3x4x8 25515-9 80850-5 Vapor Pac 152KB 14×12 141-1558 MODEL NO. APKRM 70 75 WEIGHT (1861) 20 32000/86000 4500/28500 4500 lbs. 3050 lbs. 545 lbs. 듛 425 lbs. 425 lbs. 1231 lbs. 680/830 lbs 3000 lbs. 469 lbs. 12 lbs. 1050 lbs. 760 146 lbs. |89 |be 46 lbs 탏 ZZ 1/8/110/1575 100/460/1800 7.5/460/3500 ZZ 3/460/3500 3/460/3500 5/460/3500 20/460/1800 Z REV. DATE Z 3/460/1800 ž Z ž /3/460/1750 0/460/1800 ISSUE DATE 10/240 /3/230/1760 /2/115/1750 .5/230/1800 New York DAC & P Equipment Root & Root & DAC & P Equipment Siewert Equipment Equipment Seperation Tech., Inc. Seperation DAC & P Tech., Seperation SUPPLEE Equipment Tech., 'nc 고 6-8 weeks 4-6 weeks 8-10 weeks 6-8 weeks 4-6 weeks HAD TIME 8-9 6-8 weeks 6-8 weeks 2 wasks 0 6 - 8 weeks 2 weeks 6-8 weeks 6-8 weeks 1-2 weeks 8-10 weeks Wook weeks Wooks ¥eek Weeks Weeks Weeks Wooks 2-25-94 2-25-94 2-25-84 11-18-93 RECEIVED 2-25-94 GI IVE STATE ARTIVAL Page 1 2-7-94 2-25-84 Dec. 30, 2-9-94 2-9-94 2-9-94 2-9-94 11-18-93 RECEIVED 2-25-84 Aug 11, 1993 2-9-94 2-7-94 2-7-94

Supplier and

date not listed indicates equipment not order





Penn Center West III, Suite 106 -- Pittsburgh, Pennsylvania 15276 Phone (412)-787-7144 -- Fax (412)-787-7218

PRIORITY	SEND BETWEEN 8am AND 5pm SEND BETWEEN 5pm AND 8am
DATE: 1	TOTAL PAGES 22 (Including This Page)
	ACCOUNT CODE: 287
	B&P or O/H:
TO	
10.	Dare Hagen NAME
	$A \leftarrow H$
	Company Name or Location
FAX NO.:	216-378-9258
FROM:	Brian Radus
	NAME
MESSAGE:	
	
-3	
-	
(FAX.FRMREVISED:39)	



January 24, 1994

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB99-94

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 7

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 7 covering the period from January 10, 1994 to January 23, 1994 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Construction Manager

BDR/dae

Attachments

K. Andromalos - McLaren/Hart CC:

M. Doster - NYDEC

R. Spears - Carborundum

A. Hastee - Carborundum

J. Parker - McLaren/Hart

D. Hagen - Haley & Aldrich

F. Raise - Metaullics Systems

V. Wroniewicz - McLaren/Hart

BI-WEEKLY CONSTRUCTION REPORT NO. 7 PERIOD JANUARY 10, 1994- JANUARY 23, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

<u>Training (Activity No.01100)</u>: H&A and McLaren/Hart performed on-site training and for new site workers.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material inside the filters building to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Nine lined and tarped roll-off containers are being utilized for the temporary staging materials. H&A gave McLaren/Hart permission to dump two clean roll-off boxes of soil on Friday, January 21, 1994. The roll-offs will be scheduled to be transferred the area shown as the soil staging area on McLaren/Hart drawing M005. The clean soil will be dumped on the ground as approved by H&A and covered with poly.

ROLLOFF	CONTENTS	QUANTITY
2	Concrete	30 cy
1	PPE	18 cy
5	>20ppm	~100 cy
1	>200ppm	1.5 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VEW, AI and piezometer locations. H&A is approving well locations prior to drilling.

Temporary Groundwater Wells Hook up: Both wells are operating.

Phase 2 Filter's Building Well Placement, Interior Room Lighting, Electrical Service (Activities 07000, 09650,& 11000): 75% of the VES and AI piping was installed inside the Filter's Building. Pressure testing, backfilling, and resurfacing was completed. Conduit was encountered which negatively impacted excavating and pipe installation production. All schedules were met. Treatment building lighting was completed. Electrical contract was awarded to Ferguson Electric to complete instrumentation hook-up. Ferguson was previously approved by BPA as an electrical subcontractor. GMG or RL Stone will work as a subcontractor to Ferguson and will provide the instrumentation portion of this work.



ENVIRONMENTAL ENGINEERING CORPORATION

Well Placement - Phase I (Activity Series 12000 & 6000: Performed utility checks in the South well field. Installed a total of 13 wells in the south well field (3 AI wells, 4 VEW wells and 6 piezometers).

Extra Work: The following extra work was performed during this period:

- Performed split-spoon sampling during VES well installation as directed by H&A.
- Delays due to conduit in Filters Building excavation.
- Additional work to pressure test piping due to starting excavation/installation from west end.
- 2. Quality Assurance: In addition to the quality assurance activities performed by H&A, McLaren/Hart performed the following additional activities:
 - Prepared nine (9) test cylinders for unconfined compression testing from concrete and grout supplied for floor and trench backfill.
 - Performed head-space analysis on soil samples during drilling operations to assist in the placement of well screens.
 - Performed soil screen as directed for soil handling to determine primary disposition of soil cuttings.
 - Pressure tested pipe installed in Filter's Building.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

1,767 Hours

Total:

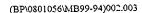
11,084 Hours

Without Accident:

8,416 Hours

- B. <u>Accident Summary</u>: There were no reportable accidents during this period.
- C. Incident Summary: No incidents.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.





Progress Report Page 3

- E. Health and Safety Monitoring: During this period, air monitoring was performed in accordance with the site HASP. No elevated Hnu readings were encountered. Dust monitoring during Filter's Building concrete cutting showed results above the action level of 5mg/m³ and the person cutting upgraded to Level B. Additional engineering controls were instituted by McLaren/Hart.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: Weather did not cause work delays.
- 6. Major Issues/Problems/Delays:

The SPDES permit application was resubmitted by Carborundum on December 23, 1993.

B. Other Activities

- 1. <u>Design</u>: McLaren/Hart is currently investigating the possibility of installing VES piping above ground.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. Procurement: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
 - Ferguson Electric was selected to complete electrical work and instruments installation.
- 4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells

128 124

Piezometers

VEW wells

61



Progress Report Page 4

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

1,403 Hours

Total To Date:

9,788 Hours

Projected Next Period:

1,400 Hours

(2 Weeks)

<u>Change Orders</u>: Two new change orders were discussed during this time period. The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule for the period of December. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart awarded electrical subcontract to Ferguson Electric, a previously approved subcontractor. McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by: Brian Radus

Construction Manager January 24, 1994





ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

OSHA/CARBORUNDUM TRAINED WORKERS

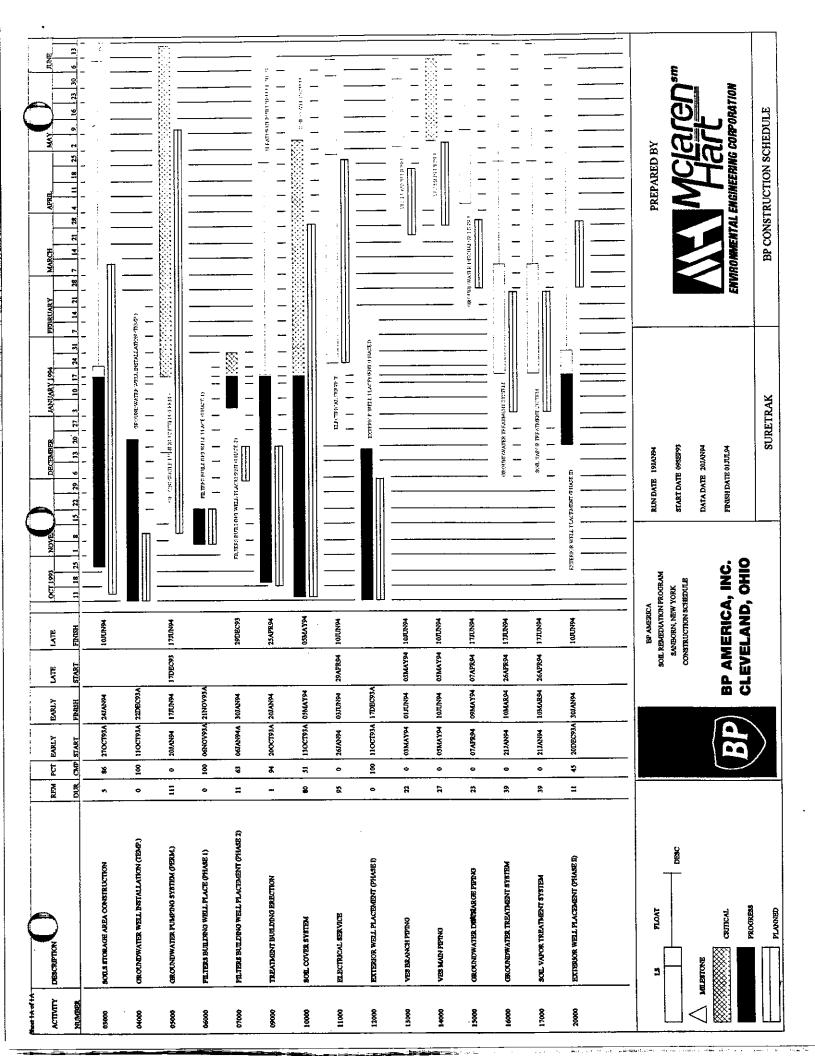
COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	X
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Ken Andromalos	X	X
·	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
	Mike D'Eufeumia	X	X
Empire Soils	William L. Levergood	X	Х
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X

	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	X	X
	Anthony Mitwick	X	X
Armand Cerrone	Dave Burns	X	x
	Vincent Cerrone	X	X
	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	X	X
	Fred J. Diez	X	X
	Lewis D'Antuono	X	X
	George D. Perry	x	X
	Leo Lipomi	X	X
	Rick Bernier	X	X
	Jack D'Antuono	X	X
	Enrico Berulaqua	X	X
Walter J. Johnson	Doug Janeese	X	X
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Salvatore A. Nasca	X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
	Robert Boland	X	X
	Ronald Hillman	X	X
	Bob Green	X	X

	Ray Mosci	X	X
	Steve Chulli	X	X
	Rick Johnson	X	X
	Brian Perry	X	X
	Ron Follum	X	X
Niagara Boundry	Alan W. Slaugenhoupt	X	х
	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	X	X
	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	Х	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
	Jerauld Stanish	X	X
Frontier Building	Wayne Zimmerman	X	X
	Frank P. Tedesco	X	X
	Michael Kuligsoiski	X	X
	John Hart	X	X
	David McElwain	X	X
Niagara Piping	Steven Bartlet	X	Х
	Alex Green	X	X
	Wayne Laska	X	X
Apollo Steel Corp.	Mike Kessler	X	X
•	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X
	Albert Black	X	X
	Roy Owens	X	X
	•	**	Λ

	David Sears	X	Х
CIR	Jeff Haseley	X	X
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
J.W. Danforth	Peter Reagan	x	x
••••	Tom Reagan	X	X

ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ATTACHMENT C CHANGE ORDER LOG

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

ATTACHMENT C
SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT
SANBORN, NEW YORK SITE

		SOIL REMEDIATION	ON/GROUNDWATER TREAT	IEDIATION/GROUNDWATER TREATMENT PROJECT	
			SANBOKK, NY SILE	I SILE	
			CHANGE ORDER LOG		
	NO.	TITLE	DATE REOUESTED	COMMENTS	STATUS
7) (A)	Relocate treatment building	7/21/93		Complete
)	02	Existing GRS instrument/electrical	7/21/93	McLaren/Hart to submit cost estimation.	In progress
£	03	Filters building valving relocation	7/21/93	McLaren/Hart to submit cost estimation.	In progress
个	04	Groundwater pretreatments	7/21/93	McLaren/Hart to submit cost estimation.	In progress
	©	Ex-situ cell relocation	7/21/93	McLaren/Hart will not charge for work involved with the Ex-situ cell.	Complete
	90	Sales tax exemption	9/3/93	Proceed according to MB30-93 letter.	In progress
Z	Æ	Tarayvac well closure	10/13/93	To be billed next invoice.	Complete
કુ	80	Emergency generator	10/15/93	To be billed next invoice rental and relay installation.	Complete
Z	68	Split spoon sampling	10/15/93		Ongoing
E	ţ	Out flow redesign	10/21/93		Ongoing
Z	‡	Delay due to power failure	12/15/93	McLaren/Hart working compiling cost total.	Complete
af .	12	Temporary groundwater well installation	12/17/93	For equipment and material that will not be used during operation. McLaren/Hart compiling costs.	In Progress
र्ध	77	Standby rate Level B equipment for Filters Building upgrade	1/7/94	Will use rates supplies with original proposal and subcontractor quote and provide cost estimation.	In Progress
	14	Delay in excavation due to conduit under floor.	01/22/94	McLaren/Hart will work with BPA and H&A to determine total delay time and corresponding cost.	In Progress
	15	Additional pipe testing cost incurred due to working trench from west to	01/22/94	McLaren/Hart will provide cost for additional work.	In Progress
		east.			

3/6/2/2/2/

of 16/14 Sumplingumed 1495 Perum.

8 PPE DISPOSAL AS HARWASTE

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



January 25, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB100-94

SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of January 25, 1994 through February 4, 1994.

FILTERS BUILDING WELL PLACEMENT - PHASE 2 (ACTIVITY SERIES 07000)

07300 - Floor Trenching/Piping/Restoration (WK 3)

Tuesday, January 25, 1994

McLaren/Hart and Haley & Aldrich will meet with Metaullics Systems to identify areas that will need to be cleared for trenching activities to commence.

Wednesday, January 26, 1994 through Thursday, January 27, 1994

McLaren/Hart will lay out the anticipated trench boundaries for subsequent saw cutting. The boundaries will be marked with paint and/or chalk.

Thursday, January 27, 1994

Beginning at 3:30 pm, McLaren/Hart and its subcontractor will begin saw cutting of previously marked trenches.

(BP\0801056\MB100-94.RFD)

Mr. Don Langshaw January 25, 1994 Page 2

Friday, January 28, 1994 through Sunday, January 30, 1994

Beginning at 3:30 pm on Friday, McLaren/Hart and its subcontractors will begin concrete removal, trenching, piping, and backfilling as outlined in the Revised Filters Building Work Procedures submitted to BP America by McLaren/Hart.

EXTERIOR WELL PLACEMENT - PHASE II (ACTIVITY SERIES 20000)

20200 - VEW and AI Well Placement

Tuesday, January 25, 1994 through Friday, February 4, 1994

Due to adverse weather conditions at the site, Empire Soils and McLaren/Hart have decided to suspend drilling activites for two (2) weeks. McLaren/Hart will resume drilling activities during the week of February 7, 1994.

Sincerely,

McLAREN/HART

Robert F. DeLisio

Roll 3. Osfins

Project Engineer

Brian Radus Site Manager

cc:

M. Plautz - McLaren/Hart

M. Doster - NYSDEC

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

J. Parker - McLaren/Hart

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite







ATTACHMENT E PROCUREMENT SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

	PROJECT NO	8.05	8.C.F.		
	PRO IECT	PREP RV			
PROCESS EQUIPMENT SCHEDULE	BP AMERICA, INC.	CARBORUNDUM FACILITY	Wheatfield, New York	PLANT TYPE Soil Remed./GW Treatment Proj.	
		<u>-</u>) 2	_	'PE	
		LOCATION		PLANT TY	

Aug 11, 1993 Dec. 30, 1993

ISSUE DATE REV. DATE REV. NO.

Page 1

LIEM	DESCRIPTION	32/5	TVPE	MANUFACTURER	24004					
							PIECE VICE NA	SUPPLIER	LEAD TIME	ANTICIPATO
P-601,2,4,5,10		27" Hg vac	Shaded Pole	Gast Mfn Com	BOA-V110 AA	WEIGHT ILES #	***			ARRIVAL .
P-701A-D	Vacuum Blower	L		Doots Dresses	DOM-V110-AA	12 lbs.	1/8/110/1575		:	
B-901,2,3,4	Air Injection Blower	1000 cfm. 5 psia	Positive Displacement	Boots Drasser	200000	4500 lbs.	100/460/1800	DAC & P	8-10 weeks	2-25-94
U-701	Air/Water Separator	400 gallons	N/A	Weerels	OID-RAI-U	3050 lbs.	20/460/1800	DAC & P	6-8 weeks	2-25-94
F-701	Particulate Filter	50 microns	Inline	Studdend Cilemone	N/A	545 lbs.	N/A	DAC & P	4-6 weeks	2-25-94
F-702	Particulate Filter	10 microns	Inline	Stoudard Shericars	100-14	425 lbs.	N/A	DAC & P	6-8 weeks	2-25-94
H-701	Heat Exchanger	9316 CEM	Motor Canina	Stoadard Stiencers	F8-13/	425 lbs.	N/A	DAC & P	6-8 weeks	2-25-94
VC-701,702	Vanor Phase Carbon	12 EOO Ibe	Died	Achanger Inc.	C-375	1231 lbs.	N/A	DAC & P	4-6 weeks	2.25-94
	Unit	12,500 lbs	Activated	Calgon	Vapor Pac 10	14500/28500	N/A		1-2 weeks	
P-801A,B	GW Well Pump	100 GPM @ 140' TDH	Submersible	Grindfor Brings	7 07000	ps.				
	•	50 GPM @ 130' TDH		Granaros rumps	80250-5	146 lbs.	5/460/3500	Root &	1 week	RECEIVED
P-802-A,B	GW Well Pump	50 GPM @ 130' TDH	Submersible	Grindfor Pumps	60630-6		3/460/3500	Nest		11-18-93
1		25 GPM @ 180'TDH			25515-9	145 108.	3/460/3500	Root &	1 week	RECEIVED
F-803A,B,C	Filter Feed Pumps	200 GPM @	Centrifugal	Aurora	Series 3x4x8	189 fbs.	7.5/460/1750	Siewert	6-8 weeks	7-9-94
P-BO4A R	Rida Suma Dumas	15 COM @						Equipment		; ;
	edum i duma Bara	25 FT TDH	Submersible	Aurora	0SP33		1/3/230/1750	Siewert	6-8 weeks	2-9-94
P-805A,B,C	S-801B Pumps	200 GPM @	Centrifugal	Attrora	2".A".O"			Equipment		
		35.1 Ft TDH			Series 350		3/460/1800	Siewert	6-8 weeks	2-9-94
F-806A,B,C	GAC Feed Pumps	200 GPM @	Centrifugal	Aurora	2"v3"v10"		1014001400	cquipment		
		104.8 Ft TDH			Series 350		10/460/1800	Siewert	6-B weeks	2-9-94
/08-A	A/W Sep. Pump	20 GPM @	Centrifugal	Aurora	324	469 lbs	1/3/460/1750	Cicinan	T	
0000							oci i botisii	Fainment	o-o weeks	2-9-94
909-	Chem. Feed Pump	0.1-1 GPH	E	LMI	141-1558				2 weaks	
P.800	Carrieda Life Direct								•	
	duna alla aflewas	50 GPM (W	Submersible	Zoeller	14x12	50 lbs	1/2/115/1750	Seperation	6 - 8 weeks	2-7-94
T-801	Equalization		Vertical		1100 10			Tech., Inc.		
		8	Тор	Jankuc	5130-40		N/A		3 weeks	
T-802	=			Snyder	5480-40		MVA			
			Closed Top				Ç		3 Weeks	
		100 microns		Plenty Products inc.	BFA-S-150-6-C5	760 lbs	NIA		Ī	
F-102A,B		50 microns	:				(Seperation	o weeks	2-7-94
	pper	2000 scfm		New York Blower	152KB	3000 he	1 5/220/1000	lecn., Inc.	T	
		1.5 HP			!		1.0/200/1000	Separation	o weeks	2-7-94
S-801A,B	-	5 ft Diam.		Magnum Plastics		1050 he	MIA	lecn., inc.		
	Towers	25 ft. ht. 600 GPM							o weeks	_
LC-801A,B	Liquid Phase		Antivoted			_				
				Cargon Carbon	7.5	32000/86000	N/A		8-10 weeks	
E-601	Air Compressor	44.0 CFM (0)	pe	Gardner Denver	APKRM	sqic	10/240		2 weeks	
			reciprocating							

Supplier and errival date not listed indicates equipment not order.
 DAC & P: Detroit Air Compressor and Pump Co.



ENVIRONMENTAL ENGINEERING CORPORATION

March 7, 1994

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056

SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB132-94

SUBJECT:

BI-WEEKLY CONSTRUCTION REPORT NO. 10

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 10 covering the period from February 21, 1994 to March 6, 1994 for the above-referenced project.

Please call the undersigned at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Construction Manager

Matthew C. Plautz Project Manager

BDR/MCP:jah

Attachments

cc: K. Andromalos - McLaren/Hart

M. Doster - NYDEC

R. Spears - Carborundum

A. Hastee - Carborundum

J. Parker - McLaren/Hart

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

BI-WEEKLY CONSTRUCTION REPORT NO. 10 PERIOD FEBRUARY 21, 1994 - MARCH 6, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): No training was preformed this period.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material as necessary to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Seven lined and tarped roll-off containers are being utilized for the temporary staging of materials.

ROLLOFF	CONTENTS	QUANTITY
3	Concrete	60 cy
1	PPE	20 cy
2	<20ppm	30 cy
1	>20ppm	22 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VEW, AI and piezometer locations. The BP onsite representative is approving well locations prior to drilling.

Temporary Groundwater Wells Hook up: Both wells are operating.

Electrical Service (Activity 11000): McLaren/Hart is working with Ferguson and Haley and Aldrich to complete final design of groundwater pumping systems. Procurement continues. Transformer, VOC analyzer, and MCC were ordered.

Mechanical Work: (Activities 1300 Through 1700): J.W. Danforth was awarded the mechanical contract. They were approved as subcontractors by BPA. They will start setting up equipment on March 7, 1994.

Well Placement - Phase I (Activity Series 12000 & 6000: Performed utility checks in the South well field. Installed a total of wells in south well field (14 AI, 6 VEW, and 10 Piezometers).



Extra Work: The following extra work was performed during this period:

- Screening and split spoon sampling.
- Quality Assurance: Other than the quality assurance activities performed by H&A, McLaren/Hart performed no additional activities:
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

675 Hours

Total:

13,519 Hours

Without Accident:

10,851 Hours

- B. Accident Summary: There were no reportable accidents during this period. There has been one accident to date which occurred on November 8, 1993.
- C. <u>Incident Summary</u>: There were no incidents reported this perriod. Two incidents were reported to date, they occured on 12/7/93 and 2/14/94.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No Elevated air monitoring readings were detected.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. Inclement Weather: Weather did not affect work performance this period.



Progress Report Page 3

6. Major Issues/Problems/Delays:

The SPDES permit application was resubmitted by Carborundum on December 23, 1993.

B. Other Activities

- 1. Design: No design issues were addressed this period.
- 2. Permitting: No permits were received during this period.
- 3. Procurement: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
 - John W. Danforth was awarded the mechanical contract this period.
 - Ferguson Electric is continuing procurement of electrical equipment.

4. <u>Project Controls</u>:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells

157

Piezometers

140

VEW wells

72

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

539 Hours

Total To Date:

11,631 Hours

Projected Next Period:

700 Hours

(2 Weeks)

Manpower

91 Man hours

(Peak Shift, 2/22, 24 hour period)

<u>Change Orders</u>: The change order log is attached for general information purposes.



Progress Report Page 4

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by: Brian Radus

Construction Manager

March 7, 1994



ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

OSHA/CARBORUNDUM TRAINED WORKERS

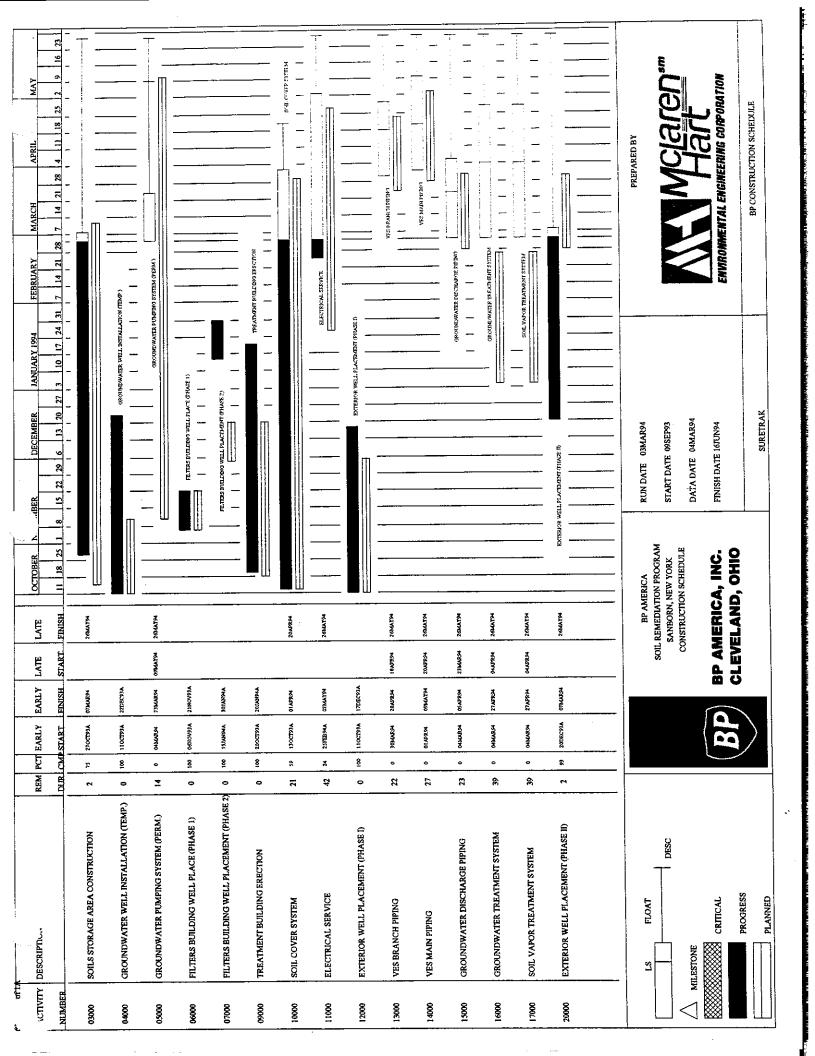
COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	x
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Ken Andromalos	X	X
	Julie Panko	X	X
	Richard C. Becken	x	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
	Don Bigley	X	X
	Mike D'Eufeumia	X	X
Empire Soils	William L. Levergood	X	x
•	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X

	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	x	X
	David Maddex	X	X
	Anthony Mitwick	X	X
Armand Cerrone	Dave Burns	X	X
	Vincent Cerrone	X	X
	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	X	X
	Fred J. Diez	X	X
	Lewis D'Antuono	x	X
	George D. Perry	X	X
	Leo Lipomi	X	X
	Rick Bernier	X	$^{\circ}\mathbf{X}$
	Jack D'Antuono	X	X
	Enrico Berulaqua	X	X
Walter J. Johnson	Doug Janeese	X	X
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Salvatore A. Nasca	X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
	Robert Boland	x	X
	Ronald Hillman	X	X
	Bob Green	X	X

	Ray Mosci	X	X
	Steve Chulli	X	X
	Rick Johnson	X	X
	Brian Perry	X	X
	Ron Follum	X	X
Niagara Boundry	Alan W. Slaugenhoupt	X	X
•	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	x	x
•	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
•	Jerauld Stanish	X	X
Frontier Building	Wayne Zimmerman	x	X
	Frank P. Tedesco	X	X
	Michael Kuligsoiski	X	X
	John Hart	X	X
	David McElwain	X	X
Niagara Piping	Steven Bartlet	X	X
Magara 1 iping	Alex Green	X	X
	Wayne Laska	X	x
Apollo Steel Corp.	Mike Kessler	X	x
Apolio Dioor Corp.	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X
	Albert Black	X	X
	Roy Owens	X	X

	David Sears	X	X
CIR	Jeff Haseley	x	X
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
J.W. Danforth	Peter Reagan	x	x
V. V. 2 (1120 VIII)	Tom Reagan	X	X

ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ATTACHMENT C CHANGE ORDER LOG SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

ATTACHMENT C

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

	STATUS		Complete	Approved	To be resubmitted	To be resubmitted	To be	In progress	To be resubmitted	To be resubmitted	To be	To be	resubmitted	resubmitted	To be resubmitted	To be	resubmitted	To be resubmitted	To be	To be	namiliancel	
EDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NY SITE	ER LOG			Mel aren/Hart to submit cost estimation.	McLaren/Hart to submit cost estimation.	McLaren/Hart to submit cost estimation.	McLaren/Hart will not charge for work	involved with the Ex-Situ Cent.	Florest according to		McLaren/Hart tracking cost.	Dill read mending	Final feview pending:	McLaren/Hart working compiling cost total	For equipment and material that will not	be used during operation. McLatentian compiling costs.	Will use rates supplies with original proposal and subcontractor quote and proposal and subcontractor quote and	McLaren/Hart will work with BPA and H&A to determine total delay time and	corresponding cost. Mcl.areen/Hart will provide cost for	additional work.	personnel during trenching. Review of H&A revised HASP.	
N/GROUNDWA' SANBORN, N	CHANGE ORDER LOG	DATE	KECOES LED	26/17//	7/21/93	7/21/93	7/21/93		9/3/93	10/15/93	10/15/01	676101	10/21/93	12/15/93	12/17/93		1/7/94	01/22/94	01/22/94	10/1/10	+611/10	
SOIL REMEDIATION		TITLE		Relocate treatment building	Existing GRS instrument/electrical	{	Groundwater premeans	Ex-situ cell relocation	Sales tax exemption		Emergency generator	Split spoon sampling	Out flow redesign	Delay due to power failure	11/19-11/20	Temporary groundwater well installation	Standby rate Level B equipment for	Delay in excavation due to conduit	under floor	Additional cost of pressure test	Industrial hygiene sampling/HASP review	
		ON		5	02A	3	04	90	90	07	80	60	01	2 =		12	13	4	·	15	91	

11	17 PPE upgrade due to air monitoring	02/21/94	Level C upgrade during installation.	Cost being developed
8	Disposal of PPE as hazardous waste.	02/21/94	PPE disposal as hazardous waste.	Cost being developed
V O	19A Redesign GW pump control.	4/18/94	Redesign groundwater pump controls.	Sumitted 2/18

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



March 7, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056
SANBORN - SOIL REMEDIATION PROGRAM
LETTER NO: MB131-94
SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of March 7, 1994 through March 18, 1994.

SOIL COVER SYSTEM (ACTIVITY SERIES 10000)

10150 - Final Subgrade Preparation

Monday, March 7, 1994 through Friday, March 18, 1994

The Northeast area will be prepared for placement of Bentomat. Work includes: removal of miscellaneous debris; smoothing and/or filling of ruts; and preparation of well heads.

10300 - Geosynthetic Clay Liner Placement

Monday, March 14, 1994 through Friday, March 18, 1994

McLaren/Hart tentatively plans to begin placement of the Bentomat material in the Northeast area as weather permits.

(BP/0801056/MB131-94.RFD)

Mr. Don Langshaw March 7, 1994 Page 2

10400 - Cover Soil Placement

Monday, March 14, 1994 through Friday, March 18, 1994

As Bentomat placement proceeds, six (6) inches of cover material will be placed.

ELECTRICAL SERVICE (ACTIVITY SERIES 11000)

11300 - Setting Electrical Equipment

Monday, March 7, 1994 through Friday, March 18, 1994

Ferguson Electric will begin placement of electrical units as they arrive on-site.

11400, 11500 - Wiring, Controls, and Instrumentation - Inside

Monday, March 7, 1994 through Friday, March 18, 1994

Ferguson Electric will begin wiring of equipment as it is placed by the mechanical subcontractor. As mechanical work progresses, instrumentation and control systems will be installed.

GROUNDWATER TREATMENT SYSTEM (ACTIVITY SERIES 16000)

16100 - Equipment Placement

Monday, March 14, 1994 through Friday, March 18, 1994

- 1. Placement of the groundwater feed pumps, sump pumps, and transfer pumps will begin. Work includes: anchoring; leveling of pumps; and grouting.
- Placement of the equalization and effluent tanks will occur as they arrive onsite. The anticipated arrival date for tanks is during the second week of March.







Mr. Don Langshaw March 7, 1994 Page 3

16200 - Interior Piping

Monday, March 14, 1994 through Friday, March 18, 1994

- Gas unit heaters and associated piping will be installed to provide heat for treatment building.
- Water service within treatment building will be installed.
- 3. Interior piping will begin as equipment placement progresses. It is anticipated that most equipment will be set prior to actual plumbing.

EXTERIOR WELL PLACEMENT - PHASE II (ACTIVITY SERIES 20000)

20200 - VEW and AI Well Placement

Monday, March 7, 1994 through Wednesday, March 9, 1994

Well placement work will conclude in the east area. McLaren/Hart has assumed approximately four (4) wells will be drilled per day by one track mounted drill rig. All well locations will be or have been approved by a BP America representative prior to drilling.

Anticipated well schedule is as follows:

Monday, March 7, 1994

VEW-72, PZ-129, VEW-66, and PZ-128.

Tuesday, March 8, 1994

VEW-60, PZ-154, AI-94, and PZ-146.

Wednesday, March 9, 1994

AI-99, VEW-62, AI-111, and VEW-65.

(BP/0801056/MB131-94.RFD)





Mr. Don Langshaw March 7, 1994 Page 4

20300 - Driller Demobilization

Thursday, March 10, 1994 through Friday, March 11, 1994

Empire Soils Investigations will demobilize equipment, supplies, and labor force after completion of drilling services.

Sincerely,

McLAREN/HART

Robert F. DeLisio Project Engineer

Brian Radus Site Manager

cc: M. Plautz - McLaren/Hart

M. Doster - NYSDEC

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

J. Parker - McLaren/Hart

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

(BP/0801056/MB131-94.RFD)



ATTACHMENT E

PROCUREMENT SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

		PROCESS EQUI	PROCESS EQUIPMENT SCHEDULE							
LOCATION	BP AMERICA, INC. CARBORIND IN EACH INC.	ÉACH ITS		PBO IEAT US						Page 1
PI ANT TVDE		ork Brk		PREP. BY	09-0801056-001 S.O.F.		ISSUE DATE			
	E Soil Herned./GW Treatment Pro	reatment Proj.					REV. DATE			March 1 1993
TEM	DESCRIPTION	BIZE	TYPE		ļ					7
P-601,2,4,1	P-601,2,4,5,10 Vacuum Samo Prima or U	and of the		MANUFACTURER	MODEL NO.	EMPTY/FULL	Т НРУ/при	× ×	ı	
P-701A-D	Vacuum Blower	1100 M	Shaded Pole	Gast Min Com		WEIGHT (LBS		SUPPLIER	TEAD TIME	ANTICIPATEN
8-901,2,3,4	1 Air Injection Blower	1000 6 -1-		Roots Dresser	104-V110-AA	12 lbs.	1/8/110/1575	ANGEL		ARHWAL .
10-70	Air/Water Separator	1	Positive Displacement	Roots Dresser	A15_DA	4500 lbs.	100/460/1800	DAC & D		7
F-701	Particulate Filter	Т	N/A	Wessels	N.M.	3050 lbs.	20/480/1800	A CAC	9-10 weeks	_
F-702	Particulate Filter	40 111111111111111111111111111111111111	Inline	Stoddard Silancom	For	545 lbs.	NA	240	8-8 weeks	9-22-94
H-701		0348 CE11	Inline	Stoddard Silencon	F03-14	425 lbs.	N/A	200	4-6 weeks	'
VC-701,702		+	pelo	Xchanger Inc	70-13/	425 lbs.	N/A	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8-8 weeks	3-22-84
	Unit	_		Calgon	Vanor Bas 45	1231 lbs.	WA	200	6-8 Weeks	3-22-94
P-BOIA,B	GW Well Pump	100 GPM @ 140" TPM	Carbon		raporrac IO	14500/28500	NA	Calgon	B Weeks	3-22-84
P-802-4 B	200000	50 GPM @ 130' TDH	elgisieiriano	Grundios Pumps	80550-5	148 the		Carbon Corp.	S WARKS	4-28-94
	dun lieu Lo	50 GPM @ 130' TDH	Submersible	Grundoe Dume	80S30-5	<u>:</u>	3/460/3500	Root &	1 week	RECEIVED
P-803A	Filter Feed Pumpe	25 GPM @ 180'TDH	:	Schipl some	60830-5	146 lbs.	3/480/3500	Neal		11-18-93
B & C		300 GPM @ 85 TDH	Centrifugal	Aurora	Sarios 200-170		1.5/480/3500	Near a	1 week	RECEIVED
r - 804A, B	Bldg Sump Pumps	15 GPM @	Submomible		Series 3x4x9B	189 lbs.	5/460/1750	Siewert	6-R wooke	11-18-93
P-805A.B.C	S- RO1B Dimes	25 FT TOH	₽	Aurora	OSP33		1/3/230/1750	Equipment	9	2-18-94
	action a constant	200 GPM @	Centrifugal	Aurora	BXT 0x12		10/200/1/30	Siewert For James	6-8 weeks	RECEIVED
P~806A,B,C	GAC Feed Pumps	200 GPM @	Centrifical		7 Impeller		3/460/1800	Siewert	6-8 Weeks	1-27-94 BECEIVED
P-607	AW Sen Pirms	104.8 Ft TDH		Aurora	2x3x11		10/460/1800	Equipment		2-10-94
	din ida	10 F 10 L	Centrifugal	Aurora	Sories 220		200	Frainmont	6-8 weeks	RECEIVED
P~808	Chem. Feed Pump	0.1-1 GPH	Diaphragm		1x1-1/4x5	469 lbs.	1/4/460/1750	Siewert	6-8 Weeks	2-21-94 RECEIVED
P-809	Sewage Lift Pump	60000		<u> </u>	141-1558			Equipment		2-14-94
0.00			919	Zoeller	14x12	50 lbs		Lab	2 weeks	3-7-94
ם ל	SPDES Discharge Pumps	e :	Centrifugal	Aurora	274V0A	SCI DO	1/2/115/1750	Seperation Tech loc	8 - 8 weeks	RECEIVED
T~801	Equalization	T	Vortice		je.	189 lbs	5/460/1750	Siewert		2-15-94
T-802	Tark	E	00	Snyder		800	N/A	Equipment	6-8 weeks	
	Tark		0,	nyder	2400 40			Corro-flo Engineeric	3 weeks	3-9-94
П		1					N/A	Corro-flo	3 woode	
R-102A,B		50 microns	9	enty Products inc. Bi	BFA-S-150-6-C5	760 lbe		Engineering		41.04
	Air Stripper Blower	2000 scfm	EN .	New York Blower		_	N/A	Seperation	6 weeks	3-16-94
S-801A,B	Jē.	5' Dia 25'Ut			192KB	3000 lbs.	1.5/230/1800	Conner		
LC-801A.B	Towers Irraid Phone	600 GPM	Ma	Magnum Plastics	-	1050 lbs.	N/A	Waste		4-13-94
7			Ö	Ilgon Carbon 7.5		8		Waste	6 weeks	4-13-94
	Aur Compressor			Gardner Denver AP	APKRIM				8-10 weeks 3	3-15-94
Supplier and an	the date not listed to	2	naciprocating				10/240	sor	2 weeks	3-18-94
AC & P : Detroit	DAC & P: Detroit Air Compressor and Prime Co.	cates equipment not	order.					Engineering		

* Supplier and arrival date not listed indicates equipment not order. DAC & P: Detroit Air Compressor and Pump Co.



ENVIRONMENTAL ENGINEERING CORPORATION

March 21, 1994

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB139-94

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 11

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 11 covering the period from March 7, 1994 to March 20, 1994 for the above-referenced project.

Please call the undersigned at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Construction Manager

Ennets B Androm For Matthew C. Plautz Project Manager

BDR/MCP:jah

Attachments

cc: K. Andromalos - McLaren/Hart

M. Doster - NYDEC

R. Spears - Carborundum

A. Hastee - Carborundum

J. Parker - McLaren/Hart

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

(BP\0801056\MB139-94)002.003

Penn Center West III, Suite 106, Pittsburgh, PA 15276 (412) 787-7144 FAX (412) 787-7218

BI-WEEKLY CONSTRUCTION REPORT NO. 11 PERIOD MARCH 7, 1994 - MARCH 20, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

<u>Training (Activity No.01100)</u>: Additional mechanical subcontract personnel were given site specific training.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material as necessary to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Seven lined and tarped roll-off containers are being utilized for the temporary staging of materials.

ROLLOFF	CONTENTS	QUANTITY
3	Concrete	60 cy
1	PPE	20 cy
1	<20ppm	8 - 10 cy
1	>20ppm	22 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VEW, AI and piezometer locations. The BP onsite representative is approving well locations prior to drilling.

Temporary Groundwater Wells Hook up: Both wells are operating.

Electrical Service (Activity 11000): BP directed McLaren/Hart to complete PW1 and PW2 according to original contract requirements. Other wells will be completed by BP.

Mechanical Work: (Activities 1300 Through 1700): Mechanical work began this period. Nine pumps were installed this period inside the treatment building. Building heaters were installed. Gas line hook-up was completed. A pressure reducing gas regulator will be installed Monday 3/21/94 to allow for proper operations of heaters.

Well Placement - Phase I (Activity Series 12000 & 6000: Well placement was completed this period (AI-5, VEW-8, PZ-15). This item will be deleted from future reports.



Soil Cover System (Activity No. 10000): Work began on March 14th with subgrade preparation. Bentomat placement will begin 3/21/94 as weather permits.

Extra Work: The following extra work was performed during this period:

- Screening and split spoon sampling.
- 2. Quality Assurance: Other than the quality assurance activities performed by H&A, McLaren/Hart performed no additional activities:
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

845 Hours

Total:

14,364 Hours

Without Accident:

11,696 Hours

- B. Accident Summary: There were no reportable accidents during this period. There has been one accident to date which occurred on November 8, 1993.
- C. <u>Incident Summary</u>: There were no incidents reported this perriod. Two incidents were reported to date, they occured on 12/7/93 and 2/14/94.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No Elevated air monitoring readings were detected.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.







- 5. <u>Inclement Weather</u>: Weather did not affect work performance this period.
- 6. Major Issues/Problems/Delays:

The SPDES permit application was resubmitted by Carborundum on December 23, 1993.

B. Other Activities

- 1. Design: No design issues were addressed this period.
- Permitting: No permits were received during this period. Letter was sent to NYSDEC on previous submittals for carbon breakthrough.
- 3. Procurement: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
 - . Bentomat arrived on site.
 - PVC pipe expected to arrive on site next period.
 - Ferguson Electric is continuing procurement of electrical equipment.

4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

Al wells

162

Piezometers

155

VEW wells

80

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

685 Hours

Total To Date:

12,316 Hours

Projected Next Period:

1200 Hours

(2 Weeks)

Manpower

121 Man hours

(Peak Shift, 3/18, 24 hour period)

Change Orders:

The change order log is attached for general information

purposes.





Progress Report Page 4

FUTURE ACTIVITIES

Field/Construction Α.

Attachment D contains our detailed two week construction schedule. This detailed schedule will be updated on a weekly basis.

Design В.

No major design work is presently anticipated during the next period.

Procurement C.

McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by: Brian Radus

Construction Manager March 21, 1994



ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

OSHA/CARBORUNDUM TRAINED WORKERS

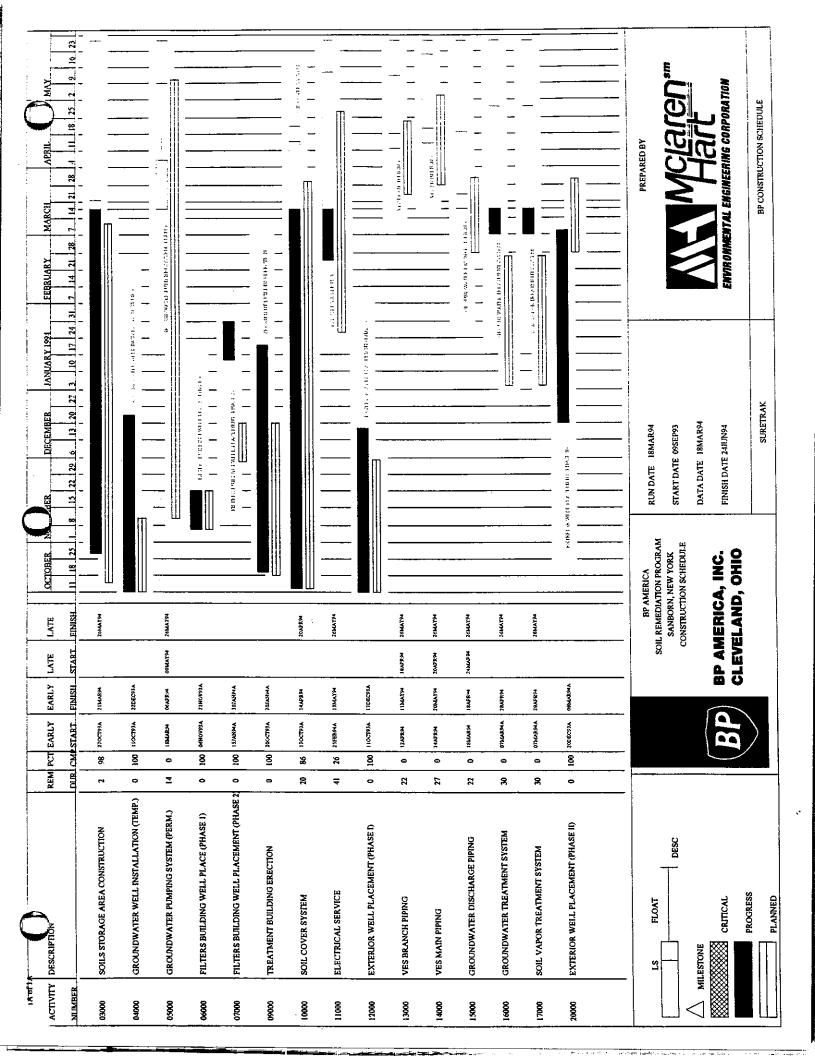
COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	x	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	x
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Ken Andromalos	X	X -
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
	Don Bigley	X	X
	Mike D'Eufeumia	X	X
Empire Soils	William L. Levergood	X	x
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X

	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	x	X
	Anthony Mitwick	X	X
Armand Cerrone	Dave Burns	X	X
	Vincent Cerrone	X	X
	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	x	X
	Fred J. Diez	X	X
	Lewis D'Antuono	X	X
	George D. Perry	x	X
	Leo Lipomi	X	X
	Rick Bernier	X	X
	Jack D'Antuono	x	X
	Enrico Berulaqua	X	X
	Willy Williams		
	Ed Seefeldt		
Walter J. Johnson	Doug Janeese	X	x
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Salvatore A. Nasca	X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
	Robert Boland	X	X

	Ronald Hillman	X	X
	Bob Green	X	X
	Ray Mosci	X	X
	Steve Chulli	X	X
	Rick Johnson	X	X
	Brian Perry	X	X
	Ron Follum	X	X
Niagara Boundry	Alan W. Slaugenhoupt	X	X
	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	X	X
	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
· ·	Jerauld Stanish	X	X
Frontier Building	Wayne Zimmerman	X	X
	Frank P. Tedesco	X	X
	Michael Kuligsoiski	X	X
	John Hart	X	X
	David McElwain	X	X
Niagara Piping	Steven Bartlet	X	X
	Alex Green	X	X
	Wayne Laska	X	x
Apollo Steel Corp.	Mike Kessler	X	X
-	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X

	Albert Black	X	X
	Roy Owens	X	X
	David Sears	X	X
CIR	Jeff Haseley	X	X
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
J.W. Danforth	Peter Reagan	x	X
	Tom Reagan	X	X
	Mike Adams	X	X
	Mark Gaines	X	
	David Cronkhite	X	X
	Donald Kelly	X	X
	Tab Mardon	X	X
	Mike Calarco	X	X

ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ATTACHMENT C CHANGE ORDER LOG

			STATUS	Complete	Approved	To be resubmitted	To be resubmitted	To be resubmitted	In progress	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted
SANBORN, NEW YORK SITE	ATER TREATMENT PROJECT NY SITE	DER LOG	COMMENTS		McLaren/Hart to submit cost estimation.	Reviewed with H&A 3/17/94.	McLaren/Hart to submit cost estimation.	McLaren/Hart will not charge for work involved with the second relocation of the Ex-situ cell.	Proceed according to MB30-93 letter.			McLaren/Hart tracking cost.	Final review pending.	McLaren/Hart working compiling cost total.	For equipment and material that will not be used during operation. McLaren/Hart compiling costs.	Will use rates supplies with original proposal and subcontractor quote and provide cost estimation.	McLaren/Hart will work with BPA and H&A to determine total delay time and corresponding cost.	McLareen/Hart will provide cost for additional work.	Additional sampling of area and personnel during trenching. Review of H&A revised HASP.
<u>SANBORN, NEW</u>	ON/GROUNDWATER THE SANBORN, NY SITE	CHANGE ORDER LOG	DATE REQUESTED	1/21/93	7/21/93	1/21/93	£6/17/ <i>L</i>	7/21/93	86/8/6	86/81/01	10/15/93	10/15/93	10/21/93	12/15/93	12/17/93	1/7/94	01/22/94	01/22/94	01/7/94
	SOIL REMEDIATION		TITLE	Relocate treatment building	Existing GRS instrument/electrical	Filters building valving relocation	Groundwater pretreatments	Ex-situ cell relocation	Sales tax exemption	Terra vac well closure	Emergency generator	Split spoon sampling	Out flow redesign	Delay due to power failure 11/19-11/20	Temporary groundwater well installation	Standby rate Level B equipment for Filters Building upgrade	Delay in excavation due to conduit under floor	Additional cost of pressure test.	Industrial hygiene sampling/HASP review.
			NO.	01	02A	03	04	90	90	40	80	60	10	Ξ	12	13	14	15	16

17	PPE upgrade due to air monitoring readings	02/21/94	Level C upgrade during installation.	Cost being developed
18	Disposal of PPE as hazardous waste.	02/21/94	PPE disposal as hazardous waste.	Cost being developed
19A	Redesign GW pump control.	2/18/94	Redesign groundwater pump controls.	Sumitted 2/18

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ENVIRONMENTAL ENGINEERING CORPORATION

March 21, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP America, Inc. 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB140-93

SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of March 21, 1994 through April 1, 1994.

GROUNDWATER PUMPING SYSTEM - PERM. (ACTIVITY SERIES 5000)

5100, 5200 - Groundwater Piping, Trenching, and Backfilling

Monday, March 28, 1994 through Friday, April 1, 1994

McLaren/Hart will begin trenching and placement of the permanent groundwater extraction piping to the treatment building.

SOIL COVER SYSTEM (ACTIVITY SERIES 10000)

10150 - Final Subgrade Preparation

Monday, March 21, 1994 through Friday, April 1, 1994

The west and southwest areas will be prepared for placement of Bentomat. Work includes: removal of miscellaneous debris, smoothing and/or filling of ruts, and preparation of well heads.

10300 - Geosynthetic Clay Liner Placement

Monday, March 21, 1994 through Friday, April 1, 1994

Bentomat placement will begin in the Northeast area and proceed from west to east. After completion of the Northeast area, liner placement will move to the West and Southwest areas. Bentomat placement will proceed as weather permits.

(BP\0801056\MB140-94.RFD)

Mr. Don Langshaw March 21, 1993 Page 2

10400 - Cover Soil Placement

Monday, March 21, 1994 through Friday, April 1, 1994

Previously sampled and approved cover soil will be placed six inches thick over place Bentomat liner.

ELECTRICAL SERVICE (ACTIVITY SERIES 11000)

11300 - Setting Electrical Equipment

Monday, March 21, 1994 through Friday, April 1, 1994

Ferguson Electric will begin placement of electrical units, junction boxes, and disconnect switches.

11400, 11500 - Wiring, Controls, and Instrumentation - Inside

Monday, March 21, 1994 through Friday, April 1, 1994

Ferguson Electric will begin wiring of equipment as it is placed by the mechanical subcontractor. As mechanical work progresses, instrumentation and control systems will be installed.

11450, 11550 - Wiring, Controls, and Instrumentation - Outside

Monday, March 21, 1994 through Friday, April 1, 1994

Exterior conduit runs and pull boxes will be installed prior to placement of Bentomat cover.

VES BRANCH PIPING (ACTIVITY SERIES 13000)

13100 - Well Head Completion and Hook-Up

Monday, March 28, 1994 through Friday, April 1, 1994

J. W. Danforth will begin completion of well heads and install pressure gauges and valves after Bentomat and soil cover are placed.

13200 - VES Piping

Monday, March 28, 1994 through Friday, April 1, 1994

J. W. Danforth will begin piping of vapor extraction and air injection wells as Bentomat and soil cover are placed.

(BP\0801056\MB140-94.RFD)



Mr. Don Langshaw March 21, 1993 Page 3

13300 - VES Pipe Trench and Backfill

Wednesday, March 23, 1994 through Friday, April 1, 1994

Trenching and pipe connection in the West area will begin. Work includes: trench layout, excavation, well head completion, piping, and backfilling.

VES MAIN PIPING (ACTIVITY SERIES 14000)

14100, 14200 - Branch Connection and VES Piping

Monday, March 28, 1994 through Friday, April 1, 1994

J. W. Danforth will begin piping of vapor extraction and air injection mains as branch connections are completed.

14300 - VES Pipe Trench and Backfill

Wednesday, March 23, 1994 through Friday, April 1, 1994

Trenching and pipe connection in the West area will begin. Work includes: trench layout, excavation, well head completion, piping, and backfilling.

GROUNDWATER TREATMENT SYSTEM (ACTIVITY SERIES 16000)

16100 - Equipment Placement

Monday, March 21, 1994 through Friday, April 1, 1994

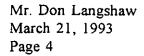
Placement of pre-filters, sump pumps, and tanks as they arrive on-site from the manufacturer.

16200 - Interior Piping

Monday, March 21, 1994 through Friday, April 1, 1994

J. W. Danforth Company will be piping of groundwater treatment system as equipment placement proceeds.





SOIL VAPOR TREATMENT SYSTEM (ACTIVITY SERIES 17000)

17100 - Equipment Placement

Monday, March 21, 1994 through Friday, April 1, 1994

J. W. Danforth will begin placement of vacuum blowers, particulate filters, heat exchanger, and air/water separator as these items arrive from the manufacturer.

17200 - Interior Piping

Monday, March 21, 1994 through Friday, April 1, 1994

J. W. Danforth will continue placement of pipe hangers and supports for interior piping of vapor treatment system. As equipment is placed, piping of treatment system will commence.

Sincerely,

McLAREN/HART

Lovert + DeLisio / Jan.
Robert F. DeLisio

Project Engineer

Brian D. Radus

Construction Manager

cc:

M. Plautz - McLaren/Hart

M. Doster - NYSDEC

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

J. Parker - McLaren/Hart

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite







ATTACHMENT E PROCUREMENT SCHEDULE

		PROCESS EQUIPMENT SCHEDULE	IENT SCHEDULE							Page 1
	BP AMERICA, INC.			PROJECT NO.	09-0801056-001		ISSUE DATE			Aug 11, 1993
LOCATION	CARBORUNDUM FACILITY			PREP. BY	S.O.F.		REV. DATE			March 21, 199
PLANT TYPE	Soll Remed./GW. Treatment Proj	atment Proj.					REV. NO.	- unt		6
ITEM	DESCRIPTION	SIZE] TYPE	MANUFACTURER	MODEL NO.	EMPTY/FULL	НР/У/ЯРМ	SUPPLIER	TEAD TIME	LEAD TIME MNTICIPATED
P-6012451	P-6012 4 5 10 Vacillim Samo Plimo 27 Ho vac	27" Hovec	Sharded Pole	mo July lee	44 011/4 400	WEIGHT (LBS.)	200000			ARRIVAL .
P-701A-D	Vacuum Blower	1100 cfm	all manages	Roots Dresser	616 DV.I	4500 lbs	1/8/110/13/3	PAC & P	Z Weeks	RECEIVED
B-901,2,3,4	Air Injection Blower	1000 cfm, 5 pslg	Positive Displacement	Roots Dresser	615-RAI-U	3050 lbs.	20/460/1800	DAC & P	6-8 weeks	3-28-94
U-701	Alr/Water Separator	400 gallons	N/A	Wessels		545 lbs.	N/A	DAC & P		3-28-94
101	Particulate Filter	50 microns	Inline	Stoddard Silencers		425 fbs.	N/A	DAC & P		3-28-94
707	Particulate Filter	To microns	Infine	Stoddard Silencers	f	425 fbs.	N/A			3-28-94
VC-701 709	Vanor Phase Carbon		water cooled	Achanger Inc.		1231 lbs.	W/A		4-6 weeks	3-28-94
201,101-04	Unit		Carbon	calgon	2	14500/28500 lbs.	N/A	Calgon Carbon Corp.		4-26-94
P-801A,B	GW Well Pump	100 GPM @ 140' TDH 50 GPM @ 130' TDH		Grundfos Pumps	80S50-5 60S30-5	146 lbs.	5/460/3500	Root &	1 week	RECEIVED
P-802-A.B	GW Well Pump	50 GPM @ 130° TDH 25 GPM @ 180°TDH	Submersible	Grundios Pumps	60S30-5 25S15-9	146 lbs.	3/460/3500	Root &	1 week	RECEIVED
P-803A B&C	Filter Feed Pumps	120 GPM @ 65 TDH 300 GPM @ 87.6 TDH	Centrifugal	Aurora	Series 2x2-1/x9 Series 3x4x9B	189 lbs.	5/460/1750	Siewert Equipment	6-8 weeks	RECEIVED
P-804A,B	Bidg Sump Pumps	15 GPM @ 25 FT TDH	Submersible	Aurora	OSP33 8x10x12		1/3/230/1750	Slewert Equipment	6-8 weeks	RECEIVED
P-805A,B,C	S-801B Pumps	200 GPM @ 35.1 Ft TDH	Centrifugal	Aurora	3x4x9A 7" Impeller		3/460/1800	Slewert	6-8 weeks	RECEIVED
P-806A,B,C	GAC Feed Pumps	200 GPM @ 104.8 Ft TDH	Centrifugal	Aurora	2x3x11 10.75 impeller		10/460/1800	Slewert	6-8 weeks	RECEIVED
P-807	A/W Sep. Pump	20 GPM @ 10 Ft TDH		Aurora	Series 320 1x1-1/4x5	469 lbs.	1/4/460/1750	Siewert Equipment	6-8 weeks	RECEIVED 2-14-94
P-808	Chem. Feed Pump	0.1-1 GPH		LMI	141-1558			Glacler	2 weeks	RECEIVED 3-10-94
P-809	Sewage Lift Pump	50 GPM @ 15 Ft TDH	1	Zoeller	14x12	50 lbs	1/2/115/1750	Seperation Tech., Inc.	6 – 8 weeks	RECEIVED
P-810A,B	SPDES Discharge Pumps	300 GPM @ 43.4 Ft TDH	Centrilugal	Aurora	3X4X9A 8" Impelfer	189 lbs 700 fbs	5/460/1750		6-8 weeks	4-20-94
T-801	ation		Vertical Closed Top	Snyder	130-40		N/A	-	3 weeks	3-29-94
T-802	nt	4,900 Gal 7.5 Ft. Dlam		Snyder			N/A	Corro-flo Engineering	3 weeks	3-29-94
F-101 A,B F-102A,B	Pre-Filters Pre-Filters	100 microns 50 microns		Pienty Products inc.	- 150-6-C5	760 lbs.	N/A	Seperation Tech., Inc.	6 weeks	3-21-94
B-801A,B	Air Stripper Blower	2000 scfm 1.5 HP		New York Blower	152KB	3000 lbs.	1.5/230/1800	Conner Water & Waste	6 weeks	3-29-94
S-801A,B	Air Stipper Towers	5' Dia. 25'Ht 600 GPM		Magnum Plastics		1050 lbs.	N/A	Conner Water & Waste	6 weeks	4-13-94
LC-801A,B	hase Unit					32000/86000 tbs.	N/A	Calgon Carbon	seks	4-4-94
E-601	essor	44.0 CFM @ 175 PSIG	ad cating	Gardner Denver	APKRM	680/830 lbs	10/240	Compressor Engineering	2 weeks	3-21-94
ELECTRICAL EQUIPMENT				*******				C		10 11
MCC	Motor Control Center Transformer	S S	Na	WESCO	Na Sa	Na Na	Na	WESCO		W0 5-1/-94
Panels	60			United Indust.		Na	Na	United Indust.		4-20-94
			Na	MSA/Baseline		Na	Na	MSA/Baseline		4-29-94
Field instrumts.	T	S S		RL Stone Dist	Na	Z Z	Z Z	RL Stone Dist		4-18-94
rryr.	Control and PC			& Services			77	& Services		15 27

^{*} Supplier and arrival date not listed indicates equipment not order. DAC & P: Detroit Air Compressor and Pump Co.



ENVIRONMENTAL ENGINEERING CORPORATION

February 21, 1994

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB117-94

SUBJECT: BI-WEEKLY CONSTRUCTION REPORT NO. 9

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 9 covering the period from February 7, 1994 to February 20, 1994 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Construction Manager

Matthew C. Plautz Project Manager

BDR/MCP:jah

Attachments

cc: K. Andromalos - McLaren/Hart

M. Doster - NYDEC

R. Spears - Carborundum

A. Hastee - Carborundum

J. Parker - McLaren/Hart

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

BI-WEEKLY CONSTRUCTION REPORT NO. 9 PERIOD FEBRUARY 7, 1994- FEBRUARY 20, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): No training was preformed this period.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material as necessary to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Seven lined and tarped roll-off containers are being utilized for the temporary staging of materials.

ROLLOFF	CONTENTS	QUANTITY
3	Concrete	60 cy
1	PPE	20 cy
2	>20ppm	~22 cy
1	>200ppm	22 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VEW, AI and piezometer locations. The BP onsite representative is approving well locations prior to drilling.

Temporary Groundwater Wells Hook up: Both wells are operating.

Phase 2 Filter's Building Well Placement Activity 07000): Filters Building work was completed last period and will be deleted from future reports.

Electrical Service (Activity 11000): Ferguson Electric has ordered the VOC Analyzer and is proceeding with additional procurement items. Ferguson plans to provide a complete procurement schedule by February 24.

Mechanical Work: (Activities 1300 Through 1700): McLaren/Hart will recieve bids on February 11, 1994, and will send a letter of intent by February 21, 1994 to J.W. Danforth or Niagara Mechanical Contractors.

Well Placement - Phase I (Activity Series 12000 & 6000: Performed utility checks in the South well field. Installed a total of 33 wells in south well field (15 AI, 5 VEW, and 6 Piezometers).





Extra Work: The following extra work was performed during this period:

- Installation of gas and portable water line to treatment building.
- 2. <u>Quality Assurance</u>: Other than the quality assurance activities performed by H&A, McLaren/Hart performed no additional activities:
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

763 Hours

Total:

12,844 Hours

Without Accident:

10,176 Hours

- B. <u>Accident Summary</u>: There were no reportable accidents during this period. There has been one accident to date which occurred on November 8, 1993.
- C. <u>Incident Summary</u>: One incident was reported this perriod. It occured on 2/14/94 when a gas line was ruptured. Two incidents were reported to date the first was 12/7/93.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No Elevated air monitoring readings were detected.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: Due to extreme weather, an exceptionally deep frost layer was encountered during the excavation of the utility lines. An hoe ram was used to break the frost so excavation could continue.





6. Major Issues/Problems/Delays:

The SPDES permit application was resubmitted by Carborundum on December 23, 1993.

B. Other Activities

- 1. <u>Design</u>: McLaren/Hart has investigated the possibility of installing VES piping above ground. It appears that the original plan for below ground installation of VES piping from the north wellfield to the treatment building will be followed.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
 - A letter of intent for Mechanical contract award will be sent February 21, to the winning contractor.
 - Ferguson Electric is continuing procurement of electrical equipment and will submit a complete schedule by February 24, 1994.

4. <u>Project Controls</u>:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells

143

Piezometers

130

VEW wells

66

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

595 Hours

Total To Date:

11,092 Hours

Projected Next Period:

700 Hours

(2 Weeks)

Manpower

81 man hours

(Peak Shift, 2/17, 24 hour period)

Change Orders:

The change order log is attached for general information

purposes.





Progress Report Page 4

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by: Brian Radus

Construction Manager February 21, 1994



ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

OSHA/CARBORUNDUM TRAINED WORKERS

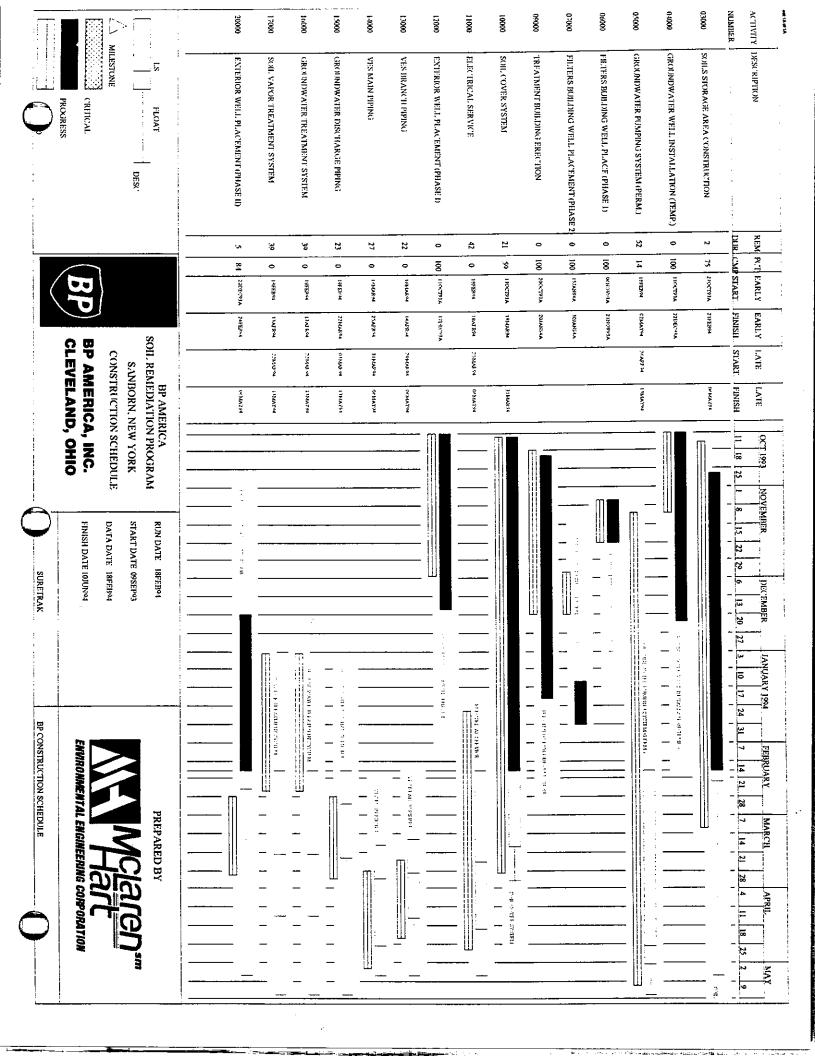
COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
	Dave Nostrant	X	X
	Brenda G. Hanna	X	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	X
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Ken Andromalos	X	X
·	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
	Don Bigley	X	X
	Mike D'Eufeumia	X	X
Empire Soils	William L. Levergood	X	x
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X

	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	x	X
	Anthony Mitwick	X	X
Armand Cerrone	Dave Burns	X	X
	Vincent Cerrone	X	X
	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	X	X
	Fred J. Diez	X	X
	Lewis D'Antuono	X	X
ž	George D. Perry	X	X
	Leo Lipomi	x	X
	Rick Bernier	X	X
	Jack D'Antuono	X	X
	Enrico Berulaqua	X	X
Walter J. Johnson	Doug Janeese	X	х
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Salvatore A. Nasca	X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
•	Robert Boland	X	X
	Ronald Hillman	X	X
	Bob Green	X	X
		4 %	Λ

	Ray Mosci	X	X
	Steve Chulli	X	X
	Rick Johnson	X	X
	Brian Perry	X	X
	Ron Follum	x	X
Niagara Boundry	Alan W. Slaugenhoupt	x	X
	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	X	X
_	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
	Jerauld Stanish	X	X
Frontier Building	Wayne Zimmerman	X	X
	Frank P. Tedesco	X	X
	Michael Kuligsoiski	X	X
	John Hart	X	X
	David McElwain	X	X
Niagara Piping	Steven Bartlet	X	х
	Alex Green	X	X
	Wayne Laska	X	X
Apollo Steel Corp.	Mike Kessler	X	x
•	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X
	Albert Black	X	X
	Roy Owens	X	X

	David Sears	X	X
CIR	Jeff Haseley	X	X
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
J.W. Danforth	Peter Reagan	x	X
	Tom Reagan	X	X

ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ATTACHMENT C CHANGE ORDER LOG

ATTACHMENT C

			STATUS	Complete	Approved	To be resubmitted	To be resubmitted	To be resubmitted	In progress	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	To be resubmitted	
YORK SILE	MEDIATION/GROUNDWALER TREATMENT PROJECT SANBORN, NY SITE		COMMENTS		McLaren/Hart to submit cost estimation.	McLaren/Hart to submit cost estimation.	McLaren/Hart to submit cost estimation.	McLaren/Hart will not charge for work involved with the Ex-situ cell.	Proceed according to MB30-93 letter.			McLaren/Hart tracking cost.	Final review pending.	McLaren/Hart working compiling cost total.	For equipment and material that will not be used during operation. McLaren/Hart compiling costs.	Will use rates supplies with original proposal and subcontractor quote and provide cost estimation.	McLaren/Hart will work with BPA and H&A to determine total delay time and corresponding cost.	McLareen/Hart will provide cost for additional work.	Additional sampling of area and personnel during trenching. Review of H&A revised HASP.	
SANBORN, NEW YORK SILE	JN/GKOUNDWA SANBORN, N	CHANGE ORDER LOG	DATE REQUESTED	7/21/93	7/21/93	7/21/93	7/21/93	7/21/93	9/3/93	10/13/93	10/15/93	10/15/93	10/21/93	12/15/93	12/17/93	1/7/94	01/22/94	01/22/94	01/7/94	
	SOIL REMEDIATIO		TITLE	Relocate treatment building	Existing GRS instrument/electrical	Filters building valving relocation	Groundwater pretreatments	Ex-situ cell relocation	Sales tax exemption		Emergency generator	Split spoon sampling	Out flow redesign	Delay due to power failure 11/19-11/20	Temporary groundwater well installation	Standby rate Level B equipment for Filters Building upgrade	Delay in excavation due to conduit under floor	Additional cost of pressure test.	Industrial hygiene sampling/HASP review.	
			NO.	10	02A	03	04	90	90	07	80	60	10	=	12	13	14	15	16	

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

17	PPE upgrade due to air monitoring readings	02/21/94	Level C upgrade during installation.	Cost being developed
18	Disposal of PPE as hazardous waste.	02/21/94	PPE disposal as hazardous waste.	Cost being developed
19A	Redesign GW pump control.	4/18/94	Redesign groundwater pump controls.	Sumitted 2/18



February 21, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056
SANBORN - SOIL REMEDIATION PROGRAM
LETTER NO: MB116-94
SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of February 21, 1994 through March 4, 1994.

TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

09550 - Utility Installation/Hook-up

Monday, February 21, 1994 through Tuesday, February 22, 1994

1. Final installation of gas and water service will be completed.

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

1. Using survey grid, McLaren/Hart personnel will layout exterior well locations in the east area for approval by BP America representatives.

(BP\0801056\MB116.RFD)

Mr. Don Langshaw February 31, 1994 Page 2

12300 - Well Placement

Tuesday, February 22, 1994 through Friday, March 4, 1994

Well placement work will continue in the east and courtyard areas. McLaren/Hart is anticipating reduced drilling rates due to adverse weather conditions. We have assumed approximately four (4) wells will be drilled per day by one track mounted drill rig. All well locations will be or have been approved by a BP America representative prior to drilling.

Anticipated well schedule is as follows:

Tuesday, February 22, 1994

AI-108, PZ-133, AI-117, and PZ-126.

Wednesday, February 23, 1994

PZ-105, AI-142, AI-132, and PZ-106.

Thursday, February 24, 1994

VEW-53, AI-130, AI-129, and PZ-107.

Friday, February 25, 1994

PZ-108, VEW-55, PZ-127, and AI-118.

Monday, February 28, 1994

PZ-134, VEW-56, AI-109, and AI-102.

Tuesday, March 1, 1994

PZ-135, AI-110, PZ-132, and AI-119.

Wednesday, March 2, 1994

PZ-122, AI-125, VEW-54, and PZ-121.

(BP\0801056\MB116.RFD)





Mr. Don Langshaw February 31, 1994 Page 3

Thursday, March 3, 1994

AI-134, AI-135, AI-136, and AI-126.

Friday, March 4, 1994

VEW-72, PZ-129, VEW-66, and PZ-128.

Sincerely,

McLAREN/HART

Robert F. DeLisio

Rolut J. Oglin

Project Engineer

Brian Radus Site Manager

cc: M. Plautz - McLaren/Hart

M. Doster - NYSDEC

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

J. Parker - McLaren/Hart

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite



ATTACHMENT E PROCUREMENT SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

3-18-94			•	•						
	2 Weeks	Compressor	10/240	680/830 lbs	APKRM	Gardner Denver	Air Cooled	44.0 CFM @	Air Compressor	E-601
	L			lbs.			Carbon		Carbon Unit	
3-15-94	8-10 weeks	_	N/A	32000/86000	7.5	Calgon Carbon	Activated	10,000 lbs.	Liquid Phase	LC-801A,B
3		Waste	3			magnum r kasiles		600 GPM	Towers	0 7,0
3105194	A wooke	Conner or avaste	N/A	1050 lbs		Magnin Plactice		1.5 17	Blower	<u> </u>
3-25-94	6 weeks		1.5/230/1800	3000 lbs.	152KB	New York Blower		2000 scfm	Air Stripper	
		_	,	_				50 microns	Pre-Filters	
3-16-94	6 weeks	_	NA	760 lbs.	BFA-S-150-6-C5	Plenty Products inc.		100 microns	Pra - Filters	F-101 A R
9	- TOOMS	Engineering	3		2400-40	Silyoer	Closed Top	7.5 Ft. Diam	Tank	208-1
3 0 0 0		Ē	N/A		E490 40	2	Closed Top	3	Tark	
3-9-94	3 Weeks)	N/A		130-40	Snyder	Vertical		Equalization	T-801
	*				8" Impeller				Pumps	
3-25-94		Siewert	5/460/1750	189 lbs	3X4X9A	Aurora	Centritugal	300 GPM @	SPDES Discharge	P-810A,B
2-15-94	o o weeks	Tech., Inc.	1/2/115/1/50	SOLIDS	14x12	Zoeller	Submersible	15 Ft TDH	Sewage Lift Pump	P-809
							Metering			
3-7-94	2 weeks				141-1558	LMI	Diaphragm	0.1-1 GPH	Chem. Feed Pump	P-808
2-14-94		ent	2 4 10 10 10	100	1x1 1/4x5	9	Collinia	10 Ft TDH	Att Sep. Famp	7-00/
RECEIVED	6-8 weeks	1	1/4/460/1750	469 lbs	Sarias 320	Aurora	Centrifical	j	ANU Can Duma	
2-10-94	Syeew R	Equipment	10/480/1800		2x3x11	Aurora	Centrifugal	200 GPM @	GAC Feed Pumps	P-806A,B,C
2-10-94	1_	ent			7" Impeller			35.1 Ft TDH		
RECEIVED	6-8 weeks		3/460/1800	-	3x4x9A	Aurora	Centrilugal	200 GPM @	S-801B Pumps	P-805A,B,C
1-27-94		ent	1/0/200/1100		8x10x12	AUTOTA	Submersible	25 FT TDH	Bldg Sump Pumps	P-804A,B
RECEIVED	R-9 wooks		1/2/040/4750		Oc Baa	2	ř	SOPM @ 87.0 IUT	,	
2-10-94	6-8 Weeks	Equipment	10/460/1750	1 8 9 lbs.	Series 2x2-1/x9	Aurora	Centrifugal	120 GPM @ 85 TDH	Filter Feed Pumps	P-803A
11-18-83			1.5/460/3500		25515-9			25 GPM @ 180'TDH	•	_
RECEIVED	1 week	ĝ.	3/460/3500	146 lbs.	60S30-5	Grundfos Pumps	Submersible	50 GPM @ 130' TOH	GW Well Pump	P-802-A.B
11-18-93			3/460/3500		60830-5			50 GPM @ 130' TDH	(11 than 1 and	
RECEIVED	1 week	Root &	5/460/3500	146 lbs.	80S50-5	Grundfos Pumps	Submersible	100 GPM @ 140' TDH	GW Wall Pium	D BOM A R
		Carbon Corp.	3	lbs.	tabol rac 10	Calgon	Carbon	12,500 108	Vapor Phase Carbon	VC-701,702
4-26-94	1 - 2 wooks		2 4	14500/28500	Varor Bas 10	Actianger nrc.	Water Cooled		٠.	L
2 2 2	1	DAC & D			F8-13/	Stoddard Silencers	Inline		Particulate Filter	F-702
3	B WOOKS		NA	425 lbs.	F65-14	Stoddard Silencers	nine		_	F-701
3-22-54	1		NA A	545 lbs.	NA	Wessels	NA			
3-22-94		DAC & P	20/460/1600	3050 lbs.	615-PAI-U	Roots Dresser	Positive Displacement	1000 cfm, 5 psig	Air Injection Blower	
3-22-84	•		100/460/1800		616 DVJ	Roots Dresser		1100 c/m		P-70(A-D
2-22-94		Allegheny Fluid	1/8/110/1575	12 lbs.	POA-VI10-AA	Gast Mfg. Corp.	Shaded Pole	27" Hg vac	Vacuum Samp. Pump	P-601.2.4.5.10
AMMYAL			-	WEIGHT (LBS						
ANTICIPATED	EVOLIME	SUPPUER	HP/V/RPM	EMPTY/FULL	MODEL NO.	MANUFACTURER	TYPE	SIZE	DESCRIPTION	MEM
								ment Proj.	Soil Remed./GW Treatment Pro	PLANT TYPE
6			REV. NO.					-	Wheatield New York	LOCATION
Feb. 17, 1994			BEV DATE		SOF COLLOS-OUT	PRED RY			BP AMERICA, INC.	
110 11 1993			I SQUE DATE		00-001056-001	l				
Page 1							ENT SCHEDULE	PROCESS EQUIPMENT SCHEDULE		

Supplier and arrival date not listed indicates equipment not order.
 DAC & P: Detroit Air Compressor and Pump Co.



ENVIRONMENTAL ENGINEERING CORPORATION

February 7, 1994

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056

SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB110-94

SUBJECT:

BI-WEEKLY CONSTRUCTION REPORT NO. 8

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 8 covering the period from January 24, 1994 to February 6, 1994 for the above-referenced project.

Please call me at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Construction Manager

BDR/jah

cc:

Attachments

K. Andromalos - McLaren/Hart

M. Doster - NYDEC

R. Spears - Carborundum

A. Hastee - Carborundum

J. Parker - McLaren/Hart

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

BI-WEEKLY CONSTRUCTION REPORT NO. 8 PERIOD JANUARY 24, 1994- FEBRUARY 6, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

Training (Activity No.01100): H&A and McLaren/Hart performed on-site training for new site workers.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material inside the filters building to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Seven lined and tarped roll-off containers are being utilized for the temporary staging of materials. H&A gave McLaren/Hart permission to place two clean roll-off boxes of soil on Friday, January 21, 1994. The roll-offs were transferred to the area shown as the soil staging area on McLaren/Hart drawing M005. The clean soil was placed on the ground as approved by H&A and covered with poly.

ROLLOFF	CONTENTS	QUANTITY
3	Concrete	66 cy
1	PPE	20 cy
2	>20ppm	~22 cy
1	>200ppm	22 cy

<u>Utility Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed VEW, AI and piezometer locations. The BP onsite representative is approving well locations prior to drilling.

Temporary Groundwater Wells Hook up: Both wells are operating.

Phase 2 Filter's Building Well Placement, Interior Room Lighting, Electrical Service (Activities 07000, 09650,& 11000): 100% of the VES and AI piping was installed inside the Filter's Building. Pressure testing, backfilling, and resurfacing was completed. Conduit was encountered which negatively impacted excavating and pipe installation production. All schedules were met. VES & AI pipe installation was complete outside of Filters Building to the future valve house location. Flowable grout was placed to 6 in. above piping. Stone will be used to fill the remaining void to pavement sub base elevation. Resurfacing will be complete after remaining trenching is complete.



Ferguson Electric has ordered the VOC Analyzer and is proceeding with additional procurement items. Ferguson plans to provide a procurement schedule within the next period.

Mechanical Work: (Activities 1300 Through 1700): McLaren/Hart will recieve bids on February 11, 1994, and award a contract by February 18, 1994 to J.W. Danforth or Niagara Mechanical Contractors.

Well Placement - Phase I (Activity Series 12000 & 6000: Performed utility checks in the South well field. No wells were installed this period.

Extra Work: The following extra work was performed during this period:

Level B Equipment was available on Site for PPE upgrade.

McLaren/Hart Equipment

3 MSA Hip Air Sets

Cerrone Equipment

6 Airline Sets

- Delays due to conduit in Filters Building excavation.
- Additional work to pressure test piping.
- Collect personal and area air samples for Vinyl Chloride.
- 2. Quality Assurance: In addition to the quality assurance activities performed by H&A, McLaren/Hart performed the following additional activities:
 - Prepared nine (9) test cylinders for unconfined compression testing from concrete and grout supplied for floor and trench backfill.
 - Pressure tested pipe installed in Filter's Building.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

997 Hours

Total:

12,081 Hours

Without Accident:

9,413 Hours

- B. Accident Summary: There were no reportable accidents during this period. There has been one accident to date which occurred on November 8, 1993.
- C. <u>Incident Summary</u>: No incidents this reporting period.



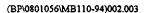
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. Health and Safety Monitoring: During this period, air monitoring was performed in accordance with the site HASP. Elevated air monitoring readings were detected at 2:00 am Saturday, February 28, 1994. 40-60 ppm total VOC were measured in breathing zone (BZ) and > 4ppm VC were measured using drager tubes in BZ. McLaren/Hart and subcontractors upgraded to Level C for 2.5 hours until drager tubes indicated VC concentration was < 4ppm. All other air monitoring (CO and dust) were below action levels throughout the period.
- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: Drilling was suspended this period due to extreme site conditions.
- 6. Major Issues/Problems/Delays:

The SPDES permit application was resubmitted by Carborundum on December 23, 1993.

B. Other Activities

- 1. <u>Design</u>: McLaren/Hart has investigated the possibility of installing VES piping above ground. It appears that the original plan for below ground installation of VES piping from the north wellfield to the treatment building will be followed.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
 - Mechanical RFP was sent to J.W. Danforth Company and Niagara Mechanical Contractors.
 - Ferguson Electric is continuing procurement of electrical equipment.





4. Project Controls:

Schedule Update: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells

128

Piezometers

124 61

VEW wells

Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

709 Hours

Total To Date:

10,497 Hours

Projected Next Period:

1,000 Hours

(2 Weeks)

Manpower

192 man hours

(Peak Shift, 1/28, 24 hour period)

<u>Change Orders</u>: The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart is procuring mechanical bids. McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by: Brian Radus

Construction Manager February 7, 1994





ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

OSHA/CARBORUNDUM TRAINED WORKERS

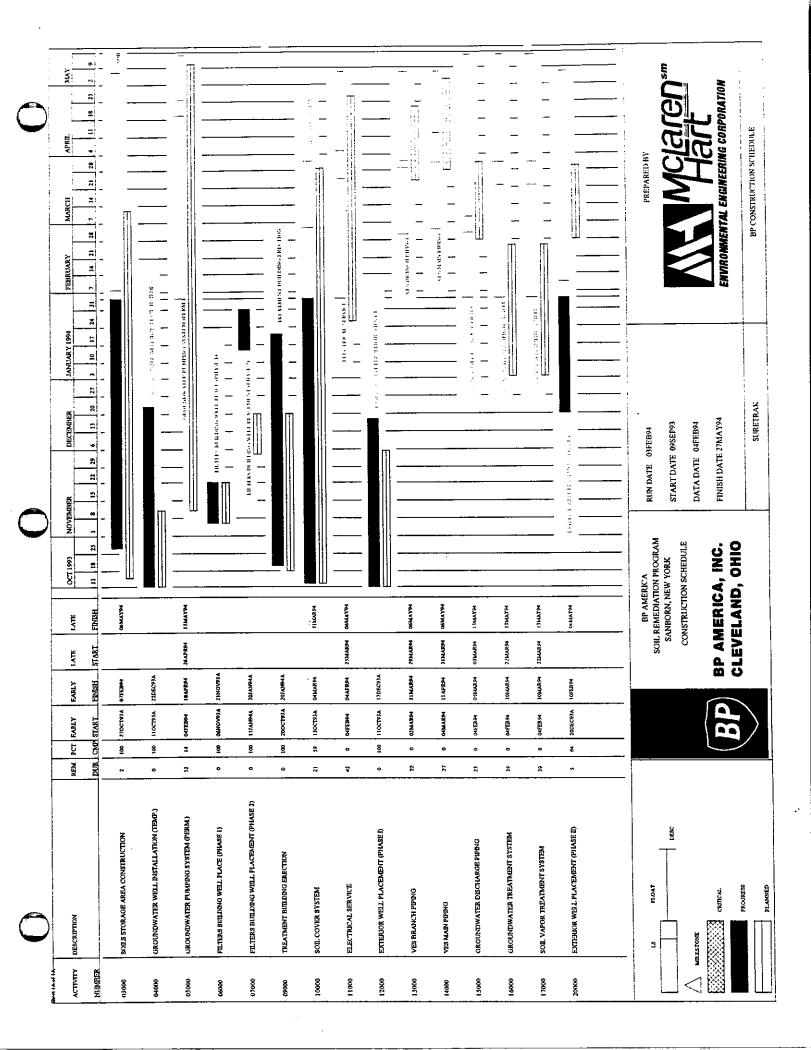
COMPANY	EMPLOYEE	40 HR. OSHA TRAINED	CARBORUNDUM TRAINING
Haley & Aldrich	Susan L. Boyle	X	X
•	Dave Nostrant	X	X
	Brenda G. Hanna	x	X
	Steven H. Phillips	X	X
	Margaret J. Corrigan	X	X
	Dan Putz	X	X
McLaren Hart	Christine A. Retherford	X	X
	Brian Radus	X	X
	Robert F. DeLisio	X	X
	Steven J. Katzenstein	X	X
	Kevin Baumgartner	X	X
	Ken Andromalos	X	X
	Julie Panko	X	X
	Richard C. Becken	X	X
	Syed Farooq	X .	X
	Joseph J. Kilcer	X	X
	Matt Plautz	X	X
	Don Bigley	X	X
	Mike D'Eufeumia	X	X
Empire Soils	William L. Levergood	X.	x
	Steven Wolkiewicz	X	X
	Ronald Brown	X	X
	Kenneth Fuller	X	X
	Thomas Kasperek	X	X
	Dan Beitz	X	X

	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	x	X
	Anthony Mitwick	x	X
Armand Cerrone	Dave Burns	X	X
	Vincent Cerrone	X	X
	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	Mark V. Cerrone	X	X
	Fred J. Diez	X	` X
	Lewis D'Antuono	X	X
	George D. Perry	X	X
	Leo Lipomi	X	X
	Rick Bernier	X	X
	Jack D'Antuono	X	X
	Enrico Berulaqua	X	X
Walter J. Johnson	Doug Janeese	X	x
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Salvatore A. Nasca	X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
	Robert Boland	X	X
	Ronald Hillman	X	X
	Bob Green	X	X

	Ray Mosci	X	X
	Steve Chulli	X	X
	Rick Johnson	X	X
	Brian Perry	X	X
	Ron Follum	X	X
Niagara Boundry	Alan W. Slaugenhoupt	x	X
	Paul Glassman	X	X
	Edward Pitz	X	X
	Barry Nichols	X	X
Ferguson Electric	Paul D. Beecher	X	X
•	Dan Kroening	X	X
	Don Freedman	X	X
	Gerald Manzi	X	X
	Robert C. Wawro	X	X
	Tim Ried	X	X
	Nicholas Metro, Jr.	X	X
	Jerauld Stanish	X	X
Frontier Building	Wayne Zimmerman	X	x
	Frank P. Tedesco	X	X
	Michael Kuligsoiski	X	X
	John Hart	X	X
	David McElwain	X	X
Niagara Piping	Steven Bartlet	X	x
	Alex Green	X	X
	Wayne Laska	X	X
Apollo Steel Corp.	Mike Kessler	X	X
	Wesley Pokelwaldt	X	X
	Robert Fiori	X	X
	Albert Black	X	X
	Roy Owens	X	X
		-	3 -

	David Sears	X	X
CIR	Jeff Haseley	X	X
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
J.W. Danforth	Peter Reagan	x	x
	Tom Reagan	X	X

ATTACHMENT B SUMMARY OF CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



ATTACHMENT C CHANGE ORDER LOG

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

	SOIL REMEDIATION	CHANGE ORDER LOG	2	7.1.1.1 ₹ .1.1.0
		REQUESTED	COMMENIS	SIALUS
Existing GRS instrument/el	ectrical	7/21/93	McI aren/Hart to submit cost estimation	Submitted 2/4
Filters building valving relocation	cation	7/21/93	McLaren/Hart to submit cost estimation.	Submitted 2/7
Groundwater pretreatments		7/21/93	McLaren/Hart to submit cost estimation.	In progress
Ex-situ cell relocation		7/21/93	McLaren/Hart will not charge for work involved with the Ex-situ cell.	Complete
Sales tax exemption		9/3/93	Proceed according to MB30-93 letter.	In progress
Tara vac well closure		10/13/93	To be billed next invoice.	Submitted 2/7
Emergency generator		10/15/93	To be billed next invoice rental and relay installation.	Submitted 2/7
Split spoon sampling		10/15/93	McLaren/Hart tracking cost.	Submitted 2/7
Out flow redesign		10/21/93	Final review pending.	Submitted 2/7
Delay due to power failure 11/19-11/20		12/15/93	McLaren/Hart working compiling cost total.	Submitted 2/7
Temporary groundwater well installation		12/17/93	For equipment and material that will not be used during operation. McLaren/Hart compiling costs.	Submitted 2/7
Standby rate Level B equipme Filters Building upgrade	ent for	1/7/94	Will use rates supplies with original proposal and subcontractor quote and provide cost estimation.	Submitted 2/7
Delay in excavation due to conduit under floor	onduit	01/22/94	McLaren/Hart will work with BPA and H&A to determine total delay time and corresponding cost.	Submitted 2/7
Additional cost of pressure test	est.	01/22/94	McLaren/Hart will provide cost for additional work.	Submitted 2/7
Industrial hygiene sampling/H review.	HASP	01/7/94	Additional sampling of area and personnel during trenching. Review of H&A revised HASP.	Submitted 2/7

ATTACHMENT D TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



February 7, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2373

PROJECT NO. 09.0801056
SANBORN - SOIL REMEDIATION PROGRAM
LETTER NO: MB111-94
SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of February 7, 1994 through February 18, 1994.

TREATMENT BUILDING ERECTION (ACTIVITY SERIES 09000)

Wednesday, February 9, 1994 through Thursday, February 10, 1994

McLaren/Hart and Walter S. Johnson Building Company will form and pour two (2) pump pads and four (4) air injection blower pads within the new treatment building. The four (4) blower pads will be precast and moved into place when the weather permits.

09550 - Utility Installation/Hook-up

Monday, February 7, 1994 through Friday, February 18, 1994

1. As weather permits, McLaren/Hart and its subcontractors will tie in gas and water service to new treatment building.

(BP\0801056\MB111-94.RFD)

Mr. Don Langshaw February 7, 1994 Page 2

EXTERIOR WELL PLACEMENT - PHASE I (ACTIVITY SERIES 12000)

12100 - Survey and Utility Checks

1. Using survey grid, McLaren/Hart personnel will layout exterior well locations in the east and courtyard areas for approval by BP America representatives.

12300 - Well Placement

Monday, February 7, 1994 through Friday, February 11, 1994

Well placement work will continue in the southwest, east, and courtyard areas. McLaren/Hart is anticipating reduced drilling rates due to adverse weather conditions. We have assumed approximately four (4) wells will be drilled per day by one track mounted drill rig. All well locations will be or have been approved by a BP America representative prior to drilling.

Anticipated well schedule is as follows:

Tuesday, February 8, 1994

AI-152, AI-151, PZ-98, and AI-148.

Wednesday, February 9, 1994

PZ-93, AI-153, VEW-47, and PZ-92.

Thursday, February 10, 1994

AI-150, PZ-95, PZ-94, and VEW-48.

Friday, February 11, 1994

AI-146, PZ-97, PZ-101, and AI-149.

(BP\0801056\MB111-94.RFD)



O recycled pag

Mr. Don Langshaw February 7, 1994 Page 3

Monday, February 14, 1994

VEW-49, PZ-151, PZ-104, and VEW-51.

Tuesday, February 15, 1994

PZ-96, AI-147, AI-144, and PZ-99

Wednesday, February 16, 1994

PZ-100, VEW-50, PZ-103, and AI-145

Thursday, February 17, 1994

PZ-105, AI-142, AI-132, and PZ-106

Friday, February 18, 1994

AI-108, PZ-133, AI-117, and PZ-126

Sincerely,

McLAREN/HART

Robert F. DeLisio

Project Engineer

Brian Radus Site Manager

cc: M.]

M. Plautz - McLaren/Hart

M. Doster - NYSDEC

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

J. Parker - McLaren/Hart

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

(BP\0801056\MB111-94.RFD)



ATTACHMENT E

PROCUREMENT SCHEDULE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

P	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN									
1	BP AMERICA INC.			NO.	1090801056-001		ISSUEDATE			1984
o :	CARBORUNDUM FACILLTY	Lu		PREP. BY	S.O.F.		REV. DATE			Feb. 7, 1994
택	wheatiete, New York Soll Remed/GW Treatment Pro	ment Pro.					HEV. NO.			47
	DESCRIPTION	BIZE	TYPE	MANUFACTURER	MODEL NO.	STANGE STANGE	немини	SUPPOER		CELVAIDIIVA
∞ ≥	P-601.2.4.5.10 Vacuum Semp. Pump	27" Haveo	Shaded Pole	Gast Min Com	1804-V110-AA	WEIGHT (LBS.)	1/9/11/1/1878			RRVAL *
2	acutum Blower			Roots Dresser	818 DVJ		100/480/1900	DACE B	A. 10 manha	70-00-0
۴	Air Injection Blower	1000 cfm, 5 pelg	Positive Displacement	Roots Dresser	1615-RAI-U	3050 be	20/480/1800	DACEP	Ŧ	7-22-04
1	Alr/Water Separator	400 gallons	N/A	Wessels	NA	1	N/A		Т	2-22-01
۴	Particulate Filter	50 microns	Infine	Stoddard Silencers	F65-14	425 he	N/A	Т	Т	2 2
	Particulate Fitter	10 morons	Infine	Stoddard Silencers	F8-137	425 be.	NA	Т	B-6 weeks	12-12
Ξ	Heet Exchanger	9316 CFM	ped	Xchanger Inc.	C-375	1231 lbs.	N/A	Г	1	-22-94
27	Vapor Phase Carbon Unit	12,500 lbs	Activated	Calgon	Vapor Pac 10	14500/28500 lbs.	N/A		1-2 weeks	4-28-94
9	GW Well Pump	100 GPM @ 140' TDH	Submensible	Grundias Pumps	80S50-5	146 lbs.	5/460/3500	Root &	1 week	RECEIVED
9	GW Well Pump	50 GPM @ 130' TDH 25 GPM @ 180'TDH	Submersible	Grundfoe Pumps	60530-5 25515-9	146 lbs.	3/460/3500	Noor S	1 week	RECEIVED
-	Filter Feed Pumps	200 GPM @ 71 Ft TDH	Centritugal	Aurora	Series 3x4x9B	189 lbs.	7.5/460/1750	Severt	6-6 weeks	2-16-94
-	Bidg Sump Pumps	15 GPM @ 25 FT TDH	9	Aurora	OSP33		1/3/230/1750	Slewert	6-8 weeks	RECEIVED 1-27-94
<u> </u>		200 GPM @ 35.1 Ft TUH		Aurora	3x4x8A 7" Impeller		3/460/1800	Slewert	6-8 weeks	2-16-94
0		200 GPM @ 104.8 Ft TDH		Aurona	2x3x11 10.75 impeller		10/460/1800	Slewent	6-8 weeks	216-94
«		20 GPM @ 10 P. TDH		Aurora	324	469 lbe.	1/3/460/1750	Siewert Equipment	2	2-16-94
O	Chem. Feed Pump	0.1-1 GPH		UMI	1411558				2 weeks	3-7-94
(Q)		50 aPM @ 15 Ft TDH	ş	Zoeller	14x12	50 lbe	1/2/115/1750	Seperation Tech. inc.	6 - 8 weeks	2-14-94
0 5	harge	@ I	100	Aurora	3X4X9A 5" tmpeller	189 lbs	5/460/1750	Severt	6-8 years	3-25-94
<u>m</u> β	atton		Vertical Closed Top	Snyder	513040		N/A			3-8-84
₩.º		4,900 Gal 7.5 Pt. Diam		Snyder	5480-40		N/A		3 weeks	3-8-84
4	Pro-Filters Pro-Filters	100 microns 50 microns		Plenty Products inc.	BFA-S-150-6-C5	760 lbs.	N/A	Seperation Tech. Inc.	8 weeks	3-7-84
₹ 8		2000 scfm 1,5 HP		New York Blower	152KB		1.5/230/1800	1 3		3-25-94
₹ 12		ŕ.3		Magnum Plastics			N/A		s)lee	3-25-94
<u>⊃3</u>	Uquid Phase Carbon Unit	w E	Activated Carbon	Calgon Carbon	7.5		V/A		5	3-15-94
Z	8			Gardner Denver	APKRM	680/830 lbe	10/240		2 weeks	2-17-94

Supplier and arrival date not listed Indicates equipment not order.
 DAC & P: Detroit Air Compressor and Pump Co.



February 7, 1994

Donald Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

Dear Donald,

Please review the attached draft copy of the Bi-Weekly Construction report No. 8. Please provide comments by 9:00 am tomorrow.

Sincerely,

Brian D. Radus Site Manager

BDR/jah

Attachments

cc: Dave Hagen

412 787 7218

McLAREN/HART

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FAX

Penn Center West III, Suite 106 -- Pittsburgh, Pennsylvania 15276 Phone (412)-787-7144 -- Fax (412)-787-7218

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	BP OIL
	Company Name or Location
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FROM:	Brian Badus Bob Delisio /jah
	NAME

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McLAREN/HART

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FAX

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April 4, 1994

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PROJECT NO. 09.0801056

SANBORN - SOIL REMEDIATION PROGRAM

LETTER NO: MB158-94

SUBJECT:

BI-WEEKLY CONSTRUCTION REPORT NO. 12

Dear Don:

Enclosed please find Bi-Weekly Construction Report No. 12 covering the period from March 21, 1994 to April 3, 1994 for the above-referenced project.

Please call the undersigned at 412/787-7144 if you should have any questions.

Very truly yours,

McLAREN/HART

Brian D. Radus

Construction Manager

Matthew C. Plautz

Project Manager

BDR/MCP:jah

Attachments

cc: K. Andromalos - McLaren/Hart

ennet B Androne

M. Doster - NYDEC

R. Spears - Carborundum

A. Hastee - Carborundum

J. Parker - McLaren/Hart

D. Hagen - Haley & Aldrich

F. Reitz - Metaullics Systems

V. Wroniewicz - McLaren/Hart

BI-WEEKLY CONSTRUCTION REPORT NO. 12 PERIOD MARCH 21, 1994 - APRIL 3, 1994 SOIL REMEDIATION PROGRAM SANBORN, NEW YORK

PROJECT STATUS

A. Field Activities

1. <u>Construction</u>: The following construction activities are in progress or have been completed:

<u>Training (Activity No.01100)</u>: Additional mechanical and electrical subcontract personnel were given site specific training.

Materials Relocation (Activity No. 01200): Metaullics personnel relocated material as necessary to provide access to the work areas.

Soils Staging Area (Activity No. 03100): Seven lined and tarped roll-off containers are being utilized for the temporary staging of materials.

ROLLOFF	CONTENTS	QUANTITY
3	Concrete	60 cy
1	PPE	20 cy
1	<20ppm	8 - 10 cy
1	>20ppm	22 cy

<u>Utility</u> <u>Checks (Activity No. 04100)</u>: Performed various utility checks in the areas of the proposed excavation locations. BP site representatives approved utility clearance prior to excavation.

Temporary Groundwater Wells Hook up: PW 1 was down until the meter was cleaned (approximately 24hrs). Both wells are currently operating.

Electrical Service (Activity 11000): Underground conduit installation began this period. The transformer is expected to be on-site May 23 and installed by May 25. The electrical subcontractor is in contact with Westinghouse to expedite the delivery.

Mechanical Work: (Activities 1300 Through 1700): Mechanical work continued this period. Interior piping continued on the 14" diameter VE line from the VE trailer. The potable water line was completed. The heaters were completed and are operational. The exterior filters building piping stub-ups were connected to manifolds and valves were installed.



Soil Cover System (Activity No. 10000): Work began on March 21 with bentomat placement in the west end of the north well field. Local fill was used as cover material. Rain during installation caused the cover material to become saturated and unusable. In anticipation of the determental effects of future rain events on the placement of the specified fill, as well as the integrity of the previously placed fill, 1" run of crusher stone was substituted for the local fill. The north area was completed on March 31. Subgrade preparation continued on the south and west well fields.

Extra Work: The following extra work was performed during this period: 1" ROC stone was substituted for local fill as cover material

- 2. <u>Quality Assurance</u>: McLaren/Hart performed checks on the cover system installation to insure the proper seams and joints were made. McLaren/Hart is monitoring the mechanical and electrical installation for compliance with the design.
- 3. <u>Health and Safety</u>: The following section summarizes various health and safety items conducted at the site:
 - A. On-Site Hours:

This Period:

1,529 Hours

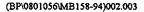
Total:

15,893 Hours

Without Accident:

1,366 Hours

- B. Accident Summary: There were no reportable accidents during this period. There has been one accident to date which occurred on November 8, 1993.
- C. <u>Incident Summary</u>: There was one incident reported this period. While laying out the trench boundaries the M/H engineer struck his thumb with a hammer causing a laceration. The engineer was transported to the hospital and received an x-ray and tetanus shot. He returned to work. Three incidents were reported to date. They occurred on 12/7/93, 2/14/94 and 2/22/94.
- D. <u>OSHA/Carborundum Trained Site Workers</u>: Attachment A contains an accumulative list of 40 hour OSHA trained and Carborundum trained site workers.
- E. <u>Health and Safety Monitoring</u>: During this period, air monitoring was performed in accordance with the site HASP. No Elevated air monitoring readings were detected.





- F. <u>Carborundum/BPA Permits</u>: No Carborundum or BPA permits were issued this period. BPA has been approving all well locations prior to drilling.
- 4. <u>Environmental Issues</u>: The following section summarizes various environmental related issues at the site:
 - A. Release Summary: No releases (i.e., spills, etc.) occurred during this period.
- 5. <u>Inclement Weather</u>: Weather caused a delay in the placement of the impermeable cover. The local fill material could not be placed during the rain event and subsequent rain events would cause the previously placed fill to saturate.
- 6. Major Issues/Problems/Delays:

The SPDES permit application was resubmitted by Carborundum on December 23, 1993. Placement of the fill material specified for protective cover for the bentomat was not able to proceed due to rain. Delivery of the main transformer was delayed by the supplier. The current anticipated arrival date is May 23.

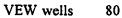
B. Other Activities

- 1. <u>Design</u>: No design issues were addressed this period.
- 2. <u>Permitting</u>: No permits were received during this period.
- 3. <u>Procurement</u>: The following procurement activities were performed during this period:
 - See Procurement schedule (Attachment E)
 - PVC pipe arrived on site this period.
 - Ferguson Electric is continuing procurement of electrical equipment.
- 4. Project Controls:

<u>Schedule Update</u>: Attachment B contains an updated construction schedule summary.

Quantity Summary:

AI wells 162 Piezometers 155





Manpower Summary: A summary of on-site McLaren/Hart manpower (including subcontractors) is as follows:

Total This Period:

1,289 Hours

Total To Date:

13,605 Hours

Projected Next Period:

1200 Hours

(2 Weeks)

Manpower

197 Man hours

(Peak Shift, 3/29 24 hour period)

<u>Change Orders</u>: The change order log is attached for general information purposes.

FUTURE ACTIVITIES

A. Field/Construction

Attachment D contains our detailed two week construction schedule. This detailed schedule will be updated on a weekly basis.

B. Design

No major design work is presently anticipated during the next period.

C. Procurement

McLaren/Hart will pursue other long lead items during this next period and will follow-up with a notice to BPA confirming the individual orders prior to engaging vendors and/or subcontractors.

Completed by: Brian Radus

Construction Manager

April 4, 1994



ATTACHMENT A

CURRENT LIST OF TRAINED SITE PERSONNEL

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

OSHA/CARBORUNDUM TRAINED WORKERS

Haley & Aldrich Susan L. Boyle X Dave Nostrant X Brenda G. Hanna X	x x x x
	X
Brenda G. Hanna X	
Dielita O. Hailia	X
Steven H. Phillips X	
Margaret J. Corrigan X	x
Dan Putz X	X
McLaren Hart : Christine A. Retherford X	X
Brian Radus X	X
 Robert F. DeLisio 	X
Steven J. Katzenstein X	X
Kevin Baumgartner X	X
Ken Andromalos X	X
✓ Julie Panko July X	X
« Richard C. Becken X	X
Syed Farooq X	X
Joseph J. Kilcer X	X
Matt Plautz X	X
Don Bigley X	X
Syed Farooq X Syed Farooq X Joseph J. Kilcer X Matt Plautz Don Bigley X Mike D'Eufeumia Donn Part Vert Trevor	X
Empire Soils William L. Levergood X	X
Steven Wolkiewicz X	X
Ronald Brown X	X
Kenneth Fuller X	X
Thomas Kasperek X	X
Dan Beitz X	X

	Alan Przywara	X	X
	Philip Bence	X	X
	Robert Taylor	X	X
	David Maddex	X	X
	Anthony Mitwick	X	x
Armand Cerrone	Dave Burns	x	X
	· Vincent Cerrone	X	X
·	Frank Perri	X	X
	Paul E. Otto	X	X
	Billy Williamson	X	X
	Donald Kneeppel	X	X
	 Mark V. Cerrone 	X	X
	Fred J. Diez	X	X
	Lewis D'Antuono	X	X
	George D. Perry	X	X
	Leo Lipomi	X	X
	Rick Bernier	X	X
	Jack D'Antuono	X	X
	Enrico Berulaqua	X	X
•	Willy Williams		
	Ed Seefeldt		
	· Bob Graf Z	X	X
Walter J. Johnson	Doug Janeese	X	X
	Robert L. Stevens	X	X
	Robert Aleks	X	X
	Charles A. Locurto	X	X
	Christopher V. Shakarjian	X	X
	Wayne D. Courteau	X	X
	Salvatore A. Nasca	. X	X
	Patrick Harrigan	X	X
	Robert J. McNerney	X	X
	James Cali	X	X
	Robert Boland	X	X

	Ronald Hillman		X	X
	Bob Green		X	X
	Ray Mosci	-	X	X
	Steve Chulli		X	X
	Rick Johnson		X	X
	Brian Perry		X	X
	Ron Follum		X	X
Niagara Boundry	Alan W. Slaugenhoupt		X	X
	Paul Glassman		X	X
	Edward Pitz		X	X
	Barry Nichols		X	X
Ferguson Electric +	Paul D. Beecher		X	x
-	Dan Kroening		X	X
	Don Freedman		X	X
	Gerald Manzi		X	X
	Robert C. Wawro		X	X
	Tim Ried		X	X
	Nicholas Metro, Jr.		X	X
	Jerauld Stanish		X	X
Frontier Building	Wayne Zimmerman		X	X
-	Frank P. Tedesco		X	X
	Michael Kuligsoiski	•	X	X
	John Hart		X	X
	David McElwain		X	X
Niagara Piping	Steven Bartlet		X	x
•	Alex Green		X	X
	Wayne Laska		X	X
Apollo Steel Corp.	Mike Kessler		X	Х
	Wesley Pokelwaldt		X	X
	Robert Fiori		X	X

	Albert Black	X	X
	Roy Owens	X	X
	David Sears	X	X
CIR	Jeff Haseley	X	X
	Charlie Carr	X	X
	Paul Kloosterman	X	X
	Larry Krueger	X	X
J.W. Danforth	Peter Reagan	x	x
	Tom Reagan	X	X
	Mike Adams	X	X
	Mark Gaines	X	
	David Cronkhite	X	X
	Donald Kelly	X	X
	Tab Mardon	X	X
	∾ Mike Calarco	X	X

ATTACHMENT B CHANGE ORDER LOG SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN. NEW YORK SITE

	SOIL REMEDIATION	ON/GROUNDWA	TER TREATMENT PROJECT	
		SANBORN, N	SANBORN, NY SITE	
		CHANGE ORDER LOG	ER LOG	
NO.	TITLE	DATE REQUESTED	COMMENTS	STATUS
01	Relocate treatment building	7/21/93		Complete
02A	Existing GRS instrument/electrical	7/21/93	McLaren/Hart to submit cost estimation.	Approved
03	Filters building valving relocation	7/21/93	Reviewed with H&A 3/17/94.	To be resubmitted
90	Groundwater pretreatments	7/21/93	McLaren/Hart to submit cost estimation.	To be resubmitted
05	Ex-situ cell relocation	7/21/93	McLaren/Hart will not charge for work involved with the second relocation of the Ex-situ cell.	To be resubmitted
90	Sales tax exemption	9/3/93	Proceed according to MB30-93 letter.	In progress
07	Terra vac well closure	10/13/93		To be resubmitted
80	Emergency generator	10/15/93		To be resubmitted
60	Split spoon sampling	10/15/93	McLaren/Hart tracking cost.	To be resubmitted
10	Out flow redesign	10/21/93	Final review pending.	To be resubmitted
Ε	Delay due to power failure 11/19-11/20	12/15/93	McLaren/Hart working compiling cost total.	To be resubmitted
12	Temporary groundwater well installation	12/17/93	For equipment and material that will not be used during operation. McLaren/Hart compiling costs.	To be resubmitted
13	Standby rate Level B equipment for Filters Building upgrade	1/7/94	Will use rates supplies with original proposal and subcontractor quote and provide cost estimation.	To be resubmitted
14	Delay in excavation due to conduit under floor	01/22/94	McLaren/Hart will work with BPA and H&A to determine total delay time and corresponding cost.	To be resubmitted
15	Additional cost of pressure test.	01/22/94	McLareen/Hart will provide cost for additional work.	To be resubmitted
. 16	Industrial hygiene sampling/HASP review.	01/7/94	Additional sampling of area and personnel during trenching. Review of H&A revised HASP.	To be resubmitted

17	PPE upgrade due to air monitoring readings	02/21/94	Level C upgrade during installation.	Cost being developed
18	Disposal of PPE as hazardous waste.	02/21/94	PPE disposal as hazardous waste.	Cost being developed
19A	Redesign GW pump control.	2/18/94	Redesign groundwater pump controls.	Sumitted 2/18

ATTACHMENT C TWO WEEK CONSTRUCTION SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE



April 4, 1994

ADVANCED COPY VIA FAX

Mr. Don Langshaw BP Oil 200 Public Square 7-3556-I Cleveland, OH 44114-2375

PP.OJECT NO. 09.0801056 SANBORN - SOIL REMEDIATION PROGRAM LETTER NO: MB157-93

SUBJECT: DETAILED TWO WEEK CONSTRUCTION SCHEDULE

Dear Mr. Langshaw:

Please find enclosed our proposed detailed two week construction schedule for the period of April 4, 1994 through April 15, 1994.

GROUNDWATER PUMPING SYSTEM - PERM. (ACTIVITY SERIES 5000)

5100,5200 - Groundwater Piping, Trenching, and Backfilling

Monday, April 11, 1994 through Friday, 'April 15, 1994

McLaren/Hart will begin trenching and placement of the permanent groundwater piping from PW-2 to the treatment building.

SOIL COVER SYSTEM (ACTIVITY SERIES 10000)

10150 - Final Subgrade Preparation

Monday, April 4, 1994 through Friday, April 15, 1994

The west, southwest, and east areas will be prepared for placement of Bentomat. Work includes: removal of miscellaneous debris, smoothing and/or filling of ruts, and preparation of well heads.

(BP\0801056\MB157-94.RFD)

10300 - Geosynthetic Clay Liner Placement

Monday, April 4, 1994 through Friday, April 15, 1994

Bentomat placement will continue in the West and Southwest areas. Bentomat placement will proceed as weather permits.

10400 - Cover Soil Placement

Monday, April 4, 1994 through Friday, April 15, 1994

Previously sampled and approved 1" stone will be placed over place Bentomat liner.

ELECTRICAL SERVICE (ACTIVITY SERIES 11000)

11300 - Setting Electrical Equipment

Monday, April 4, 1994 through Friday, April 15, 1994

Ferguson Electric will begin placement of electrical units, junction boxes, and disconnect switches as equipment arrives on site.

11400, 11500 - Wiring, Controls, and Instrumentation - Inside

Monday, April 4, 1994 through Friday, April 15, 1994

Ferguson Electric will begin wiring of equipment as it is placed by the mechanical subcontractor. As mechanical work progresses, instrumentation and control systems will be installed.

11450, 11550 - Wiring, Controls, and Instrumentation - Outside

Monday, April 4, 1994 through Friday, April 8, 1994

Exterior conduit and pull box installation will be completed in the south area prior to placement of Bentomat cover.

(BP\0801056\MB157-94.RFD)



VES BRANCH PIPING (ACTIVITY SERIES 13000)

13100 - Well Head Completion and Hook-Up

Monday, April 4, 1994 through Friday, April 15, 1994

J. W. Danforth will begin completion of well heads and install pressure gauges and valves in the Northeast area. Well head completion will continue as Bentomat and stone cover are placed.

13200 - VES Piping

Monday, April 4, 1994 through Friday, April 15, 1994

J. W. Danforth will begin piping of vapor extraction and air injection wells in the Northeast area. Piping will continue as Bentomat and stone cover are placed.

13300 - VES Pipe Trench and Backfill

Monday, April 4, 1994 through Friday, April 8, 1994

Trenching and pipe connection in the West area will begin. Work includes: excavation, well head completion, piping, and backfilling.

VES MAIN PIPING (ACTIVITY SERIES 14000)

14100, 14200 - Branch Connection and VES Piping

Monday, April 4, 1994 through Friday, April 15, 1994

J. W. Danforth will begin piping of vapor extraction and air injection mains as branch connections are completed.

14300 - VES Pipe Trench and Backfill

Monday, April 4, 1994 through Friday, April 8, 1994

Trenching and pipe connection in the West area will begin. Work includes: excavation, well head completion, piping, and backfilling.

(BPV0801056VMB157-94.RFD)





GROUNDWATER DISCHARGE PIPING (ACTIVITY SERIES 15000)

15100, 15200 - Trenching, Piping, and Backfilling

Monday, April 11, 1994 through Friday, April 15, 1994

McLaren/Hart will begin placement of the SPDES discharge piping from the treatment plant to the SPDES outfall. The 6" diameter pipe will be placed in the same trench as the groundwater piping from PW-2.

GROUNDWATER TREATMENT SYSTEM (ACTIVITY SERIES 16000)

16100 - Equipment Placement

Monday, April 4, 1994 through Friday, April 15, 1994

Danforth Mechanical will place pre-filters and tanks as they arrive on-site from the manufacturer.

16200 - Interior Piping

Monday, April 4, 1994 through Friday, April 15, 1994

J. W. Danforth Company will be piping of groundwater treatment system as equipment placement proceeds.

SOIL VAPOR TREATMENT SYSTEM (ACTIVITY SERIES 17000)

17100 - Equipment Placement

Monday, April 4, 1994 through Friday, April 15, 1994

J. W. Danforth will begin placement of air injection blowers, particulate filters, heat exchanger, and air/water separator as these items arrive from the manufacturer.

(BP\0801056\MB157-94.RFD)



17200 - Interior Piping

Monday April 4, 1994 through Friday, April 15, 1994

J. W. Danforth will continue placement of pipe hangers and supports for interior piping of vapor treatment system. As equipment is placed, piping of treatment system will commence.

Sitzperely,

McLAREN/HART

Robert F. DeLisio / par Robert F. DeLisio Project Engineer

Brian D. Radus Jac

Construction Manager

CC:

M. Plautz - McLaren/Hart

M. Doster - NYSDEC

R. Spears - Carborundum

F. Reitz - Metaullics Systems

K. Andromalos - McLaren/Hart

J. Parker - McLaren/Hart

D. Hagen - H&A

Sue Boyle - H&A

J. Lorenz - Carborundum

Jobsite

(BP\0801056\MB157-94.RFD)



ATTACHMENT D PROCUREMENT SCHEDULE SOIL REMEDIATION/GROUNDWATER TREATMENT PROJECT SANBORN, NEW YORK SITE

wo 4-17-94 wo 5-1-94 4-29-94 4-18-94		RL Stone Dist Build. Control	2 2		200		Na	Na P	ក	
WO 4 - 17 - 18 - 94		RL Stone Dist							l	
wo 4-17-							2		Field instruments 7	
wo 4-17-		MSA/Baseline					20			-
WO 4-17-		United Indust.					Z	2	8	4*
wo 4-17-		WESCO		Za C	Z		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			_
* !		WESCO	2			WESCO	Na	Z	of Center	
									_	HICAL E
	even 2	Engineering	100	-			Reciprocating			
	2 marks	Control	10/240	/830 bs	APKRM	Gardner Denver	Alr Cooled	_	Air Compressor	-601
4-4-94	8-10 weeks	Calgon	N/A	32000/86000 bs.	.5	Caigon Carbon	Carbon	7.5 ft. Diam.	-	
-		Water & Waste				2	Toph call a			C-ROTA R
4-13-94	в жеекв	Conner	N/A	1050 lbs.		Magnum Plastics	*	5' Dia. 25'Ht	per	S-801A,B
3-23-84	0 10000	Water & Waste	1:0/200/ 1000					1.5 HP		
	a unati-	Connor	15/20/1800	3000 55	150KB	New York Blower		2000 sc/m		
3-21-94	6 жөөкз	Seperation	NIA	/ 60 108.	BrA-3-150-6-05	FIERRY FRODUCTS ATC.		50 microns	Pre-Filters	1
_		Engineering				Diane, Oraline, in	Closed 10p			- 101 A R
3-29-94	3 weeks	Corro-No	N/A		5480-40	Snyder	Vertical		ַבְּבָּר -	208
-		Engineering					Closed Top	3		
3-29-94		CO110-110	N/A		130-40	Snyder	Vertical		lization	T-801
s 420-94	G-8 weeks	Equipment	5/460/1/50	700 tbs	8" impeller	25004	Certified		Discussion	9
2-15-94		Tech., Inc.		A .	avavo.	A	Contilling	15 Ft TOH		P-8104 R
-	6 – 8 weeks	Seperation	1/2/115/1750	50 lbs	14x12	Zoeller	Submersible		Sewage Lift Pump	P-809
RECEIVED	2 weeks	Clacler			141-1558	- CMI	Metering	_	Ciletti, reed runip	1 000
L.		Equipment			1x1-1/4x5				$oldsymbol{\perp}$	900
I RECEIVED	6-8 weeks	Siewert	1/4/460/1750	469 bs.	Series 320	Aurora	Centrilugal		A/W Sep. Pump	P-807
	SX96M 9-9	Equipment	10/400/1000	-	10.75 impeller	Acioia	Certification	104.8 Ft TDH	_	0.00,00
		Equipment		†	7" Impeller	*	Contillional		CAC Food Dimne	DI BOSA BIC
A RECEIVED	6-8 weeks	Slewert	3/460/1800		3x4x9A	Aurora	Centrifugal	200 GPM @	S-801B Pumps	P-805A,B,C
	O-O WOON	Equipment	1/0/200/1100		8x10x12	-		25 FT TDH		
1	0	Equipment	10/400/1/20		OSP33	Aurora	Submersible	15 GPM @	Bida Sumo Pumps	P-804A B
_	6-8 weeks	Slewert	5/460/1750	189 lbs.	Series 2x2-1/x9	Aurora	Centrifugal	120 GPM @ 65 TDH	Filter Feed Pumps	P-803A
11-18-93	1 1000	Neal	1.5/460/3500	l	25815-9			25 GPM @ 180 TDH	-	
DECEMENT OF	1 wook		3/460/3500	146 bs	60830-5	Grundtos Pumps	Submersible	50 GPM @ 130 TDH	GW Well Pump	P-802-A.B
RECEIVED	1 week	Root &	3/460/3500	146 lbs.	80S50-5	Grundios Pumps	Stomersiole	THOUSE WE WAS SON	day agai Lamb	F-601A,D
	-	Carbon Corp.		Ds.			Carbon		Unit	
cs 4-26-94	1-2 weeks	Calgon	N/A	\sim	Vapor Pac 10	Calgon	Activated	_		VC-701,702
3-28-94	teew D-A	DAC & P	NA	1231 lbs.	C-375	Xchanger Inc.	Water Cooled			
G 3-28-94	5-8 weeks	DAC & P	NA	425 lbs.	F8-137	Stoddard Silencers	inilne	10 microns	Particulate Filter	F-702
2-28-04	300	DAC A P	N/A	425 bs.	F65~14	Stoddard Silencens	inline	50 microns		
2 - 28 - 04	A-G Wash	DAC & P	N/A	545 abs	NA.	- 1	N/A	400 gailons	회	701
3-28-04	S-A Vision	DAC & P	20/460/1800	3050 53	615-RAI-U	Hoots Dresser	Positive Displacement	1000 cm, 5 psla	Į	B-90123.4
No 75-04	10 8	DAC 4 P	100/460/1800	4500 bs	616 DVJ	Roots Drasser		1100 cm	Vacuum Blower	P-701A-D
RECEIVED	D Weeks	Allegheny Flu	1/8/110/1575	12 bs.	ROA-V110-AA	Gast Mig. Corp.	Shaded Pole	27° Hg vac	Vacuum Samp. Pump	P-6012.4.5.10
20 "	LEAD TIME	SUPPLIER	HP/V/RPM	EMPTY/FULL	MODEL NO.	MANUFACTURER	TYPE	SIZE	DESCRIPTION	ITEM
								lment Proj.	Soil Remed /GW Treatment Pro	PLANT TYPE
March 21			REV NO.		8.O.F.	THEF. OF			Wheatield New York	FOCATION
Aug 11, 1983			ISSUE DATE		D9-0801056-001	PHOJECI NO.			CARRORING INC.	CONTION

Supplier and arrival date not listed indicates equipment not order.
 DAC & P: Defroit Air Compressor and Pump Co.





Appendix L - Field Modification

FIELD MODIFICATION DIRECTIVE

No.: /
<u>GENERAL</u>
Field Modification No.: Date of Work: 10 20 93
Day of Work Activity Recovery Well Installation
DeWatering Production
FIELD MODIFICATION
- Original casing diameter specified in the
-Chance to 12.0 inches
- Minimum required annulus is 4.0 inches, exceeded with 6.0 in annulus space.
The state of the s
- Original well construction with casing with 5' well
Screen Shale trap Will be omitted Ichneed to
COMMENTS
12.0 inch casing seated 1-2' into competent
bedrock and then open completed with an
open-hole type well construction
11 6120
H+A/BP will allow either type of well construction (completion
McLaren Hart is responsible for construction of performance
WORK III
ESTIMATED LABOR
Should not be additional labor assured
la this control and regulted
Modifications.
ESTIMATED MATERIAL
Λ), and Λ
to wallivnal materials should be required -
acredit to BP recording of and control
a credit to Br regarding 5' well screen/shale
Trap should be inchined.
12.0 inch Casing will replace in Casing
Casing will replace 10.0 in casing.
Casing length willalso be 1-2' longer than one inally
Specified w/ wellscreen/ shale trap.

ESTIMATED E	DUIPMENT
None	
<u> </u>	
FOTIMATED OUR OWN	
ESTIMATED SUBCON	TRACTOR COSTS
See previous	
APPROV	
Construction activities are the responsibility of the C	ontractor. If the Contractor proceeds with construction
of the above noted change during the review of	the proposed field modification, it is done so at the
responsible for measures necessary to correct the	not accepted by the Owner, the Contractor will be construction activities. The Contractor may choose to
proceed with other approved construction activities	during the Owner/Owner's Representative review of the
proposed field modifications. The Owner/Owner	's Representative will make reasonable attempts to
resolve/review field modifications in a timely manne	er.
M. J / // -	
Contractor (Company) MCLAREN / HAT Name (Print) STEVE KATZCASTEIN	
Tiele (Drive)	Signature M
The property of the party of th	Date & Time /0/20/43 0430
Subcontractor (Company)	
Name (Print)	Signature
Title (Print)	Date & Time
BP America, Inc.	
Sucas Bula	Signature Lusan Hole
the (Print) Staff Environmental Geologiste	
	10/20/13 0130

HALEY & ALDRICH INC.



Geotechnical Engineers & Environmental Consultants

Advance Copy Faxed 20 October 1993 File No. 79002-56

McLaren Hart
McLaren Hart Field Trailer
Metaullic Systems Inc.
2050 Cory Road
Wheatfield, New York

TO STEVE L.	tal memo 7671 # of pages > Z
Co.	Co.
Dept.	Phone #
Fax#	Fax #

Attention:

Mr. Steve Katzenstein

Subject:

Construction Alternatives, PW-1 and PW-2

Soil Remediation and Groundwater Treatment Project

Carborundum Facility, Wheatfield, New York

Dear Steve,

As we discussed, BPA/Haley & Aldrich will allow either the screened/open hole or open hole well completion as described in your 19 October 1993 letter. We believe the open hole completion has several advantages including ease of installation, providing more space for pump installations and reduced concerns about fouling the well during drilling. Given these advantages we urge you to strongly consider the open hole completion. We do, however, want to reiterate that the decision on the type of installation and related well performance is McLaren Hart's responsibility.

We also believe the open hole completion will result in decreased well installation costs. If you choose to construct the open-hole completion, please advise BPA of the cost reductions associated with the installation. Also, a completed field modification form will be required prior to beginning drilling. Please contact Sue Boyle for a blank form.

We have already contacted Martin Doster of the NYSDEC to advise him of the situation. He has verbally agreed to allow the open hole installation.

8001 Sweet Valley Drive Cleveland, OH 44125 Tel: 216/328-1045 Fax: 216/328-9258

Offices
Cambridge, Massachusetts
Denver, Colorado

Glastonbury, Connecticut Scarborough, Maine Silver Spring, Maryland Bedford, New Hampshire Rochester, New York If you have any question or require additional information, please contact us.

Sincerely yours HALEY & ALDRICH INC.

David J. Hagen Environmental Services Manager

Don Langshaw - BPA .cc Martin Doster - NYSDEC Matt Plautz - McLaren Hart Sue Boyle/Dave Nostrant - H&A Field Trailer



No.:

	GENERAL
	Field Modification No.: Date of Work: Day of Work Activity
Į	
I	FIELD MODIFICATION
l	Addition of split spoon sampling to VEW installation activities
Ø.	-Three soll sono samples should be taken from
	each will, be from the approximate and sente proposed
ı	screen placement. alphas Split spoons should be
١	preliminarily screened with OVA/HNU equipment. Wellso
Ì	placement will be determined pased in this screene
1	mit employers and placed in glass pars with foil living on nowth. Glass jax will be taken into trailer and
T	< <u>COMMENTS</u> .
	allowed to equilibrate for a minimum of 30 minutes.
	FO HNULOVA instrument should be preced through
١	foil, and headspace reading noted. The same
ı	HNU JOVA instrument should be fixed to every
ı	Madspace Sample MIH will aptain Madspace sample
ł	To each split spoon, H+H will obtain to approxima
	braton for confirmation analysis.
Ί	ESTIMATED LABOR
	80 VEWs w/ 3 spoons/well → 240 spoons
4	red to spoon time - 10 minutes each
1	Total time -> 2400 min. = 40 hours
ı	
	Labor Rate ~455/hour
	Total Labor - \$ 2200=
ſ	ESTIMATED MATERIAL
ı	Miscellaneas Expenses
l	for labor \$75/day × 5 days
I	
l	lotal = \$375"
l	
	•
1	
L	

Use of HUU -> 40 hours = 1 week
Total = \$340 =
Empire Soils Costs \$15= / spoon MIH Mark-up 210
17 10 / Spoon 240 spoons × 117.10 / spoon = \$4104=0
APPROVAL Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.
Contractor (Company) McLaren Hart Env. Eng. Corp. Name (Print) Robert Delisio Signature Roll J. Officer Title (Print) Asit Engineer Date & Time 10/26/93 1115
Subcontractor (Company)
America, Inc. Signature Susan Boyle Signature Signature Susan Boyle Staff Env. Geologist Date & Time 10/21/93 1115

No.: GENERAL Field Modification No.: ______ Date of Work: ______ Day _____ of Work Activity _____ FIELD MODIFICATION Reduction in boring size for VEWs AIWs and Dreumatic Diezometers. VEWs will be placed in an openhole drilled using a 41/4" ID Hollow skm auger. Ally and pneumatic Diezometers will be placed in 6" open holes drilled using a 214" ID dlow stem auger. Well constructions will not COMMENTS -The reduction of soils generated during drilling activities will be reduced substantially. will reduce the amount of exposure and how of contaminated soils. **ESTIMATED LABOR** None ESTIMATED MATERIAL

ESTIMATED EQUIPMENT 4/4-inch hollow stem augers 2/4-inch hollow stem augers	
None - No additional costs are associated with this change.	
APPROVAL Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner. Contractor (Company) McLaren Hart	
Name (Print) Robert Delisio Signature Roll J. O. Signature Polit J. O. Signature Polit J. O. Signature Polit J. O. Signature Date & Time 10 36 93 1335	
BP America, Inc. Name (Print) Susan L. Boyle Title (Print) Staff Env. Geologist Date & Fime 10/26/9 1335	

GENERAL Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity ____ FIELD MODIFICATION **COMMENTS ESTIMATED LABOR** Nove **ESTIMATED MATERIAL**

None ESTIMATED EQUIPMENT
ESTIMATED SUBCONTRACTOR COSTS None
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.
Contractor (Company) McLaren Hart Name (Print) Robert DeLisio Signature Rolt 3. O.f. Title (Print) Assit Engineer Date & Time 10 27 93 1658
Subcontractor (Company) Name (Print) Signature Date & Time
BP America, Inc. Name (Print) Susan L. Boyce Signature Signature Signature 10/27/93 1656 Title (Print) Staff F.NV. (080 LO6/ST Date & Time 10/27/93 1656

No.: 5 **GENERAL** Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity ____ FIELD MODIFICATION Mclaren Hart will stockpile contaminated soils in a lined roll off box during initial drilling activities and as bhases of the project. The roll off be lined w/ 6 mil poivethylene and covered with a tarp. The roll off box will be 'the site to facilitate easy handling of contaminated soils. Empire soils wil Store soils in drums pour to loading the roll off COMMENTS **ESTIMATED LABOR** None ESTIMATED MATERIAL I roll off box w/ 6 mil potyethylene lining and torp

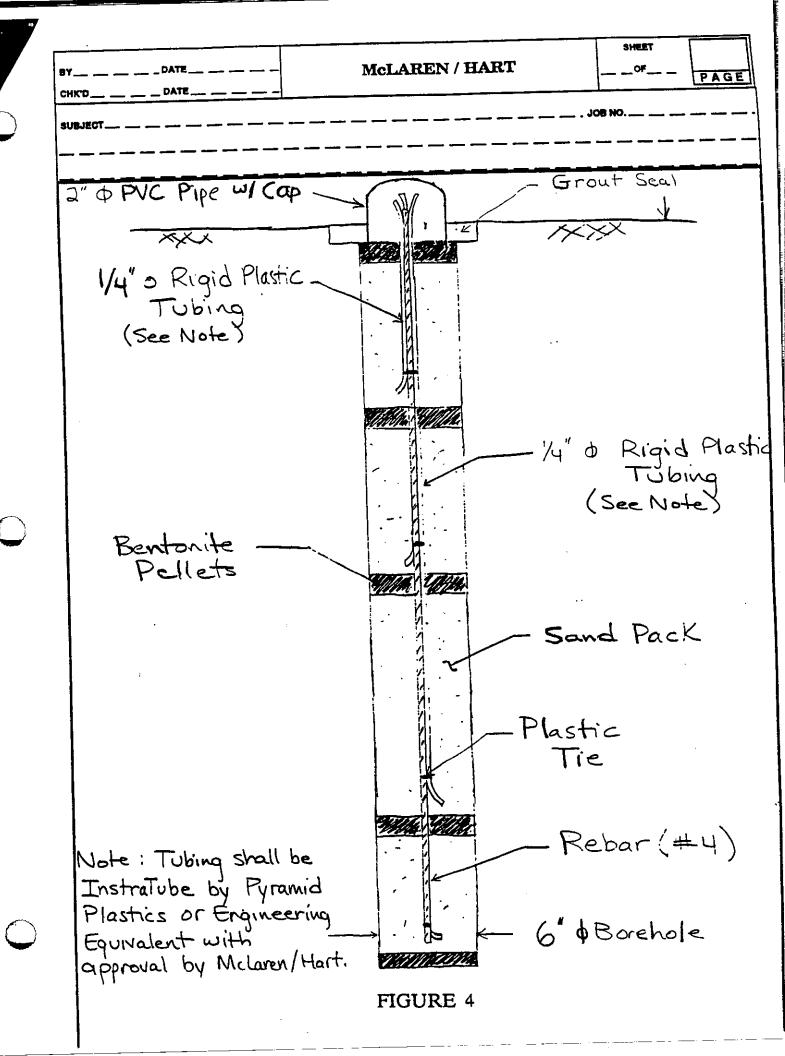
ESTIMATED EQUIPMENT	Ī
None	(
	•
None anticipated	
APPROVAL	
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.	
Contractor (Company) McLaren Hart Env. Eng. Carp. Name (Print) Robert Delisic Signature Rolet Officio Title (Print) Project Engineer Date & Time Nov 1993 14:55	
Subcontractor (Company)	
BP America, Inc. Name (Print) Susan L. Boyce Signature Suran Byce Title (Print) STAFF ENV. 6E0LD61ST Date & Pline Nov 1, 9973 1975	م

GENERAL Field Modification No.: __ 6 _____ Date of Work: 11/1193 Day of Work Activity FIELD MODIFICATION installed **COMMENTS ESTIMATED LABOR** ESTIMATED MATERIAL \$ 1760 =

ESTIMATED EQUIPMENT	
Total Estimated costs to BP for 5 month rental	
11,369 - *	
* Includes, MIH subcontractor Marking	
APPROVAL	
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.	C
Contractor (Company) McCaren/Hart	!
Name (Print) Hobert Delisis Signature Roll Of Date & Time Nov 1, 1993 1445	
Subcontractor (Company) Name (Print) Signature Date & Time	
Name (Print) Susan L. Boyle Signature Susan Boyle Title (Print) AFSAFF Env. (sen) (sen) (spist Date & Time Nov1, 1993 1445)	C

No.: 7
Field Modification No.:
Redesign of piezometer webs and their installation. MIH has redesigned priematic piezometers as shown on attabled sheet. This redesign will accomplish the same objectives as previously designed piezometer. Installation will be simplified using this procedure.
` COMMENTS
None extra.
Yy" # 4 rebar Polyethylene tubina
Filter Pads
TIASTIC ILES.

ESTIMATED EQUIPMENT		
None		
ESTIMATED SUBCON	ITRACTOR COSTS	
None extra		
<u> </u>		
	,	
	·	
APPRO	VAI	
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.		
Contractor (Company) Mclaren Hart		
Contractor (company)	Signature Rolet Oefino	
Name (Print) Proj. Engineer	Date & Time Nov. 1, 1993 15:00	
Subcontractor (Company)		
Name (Print)	Signature	
Title (Print)	Date & Time	
PD A vertex to		
BP America, Inc. Name (Print) Davis M. Nostrant	Signature Signature	
Title (Print) H & S OFFICER	Date & Time 14/1/23 1545	
777 777		



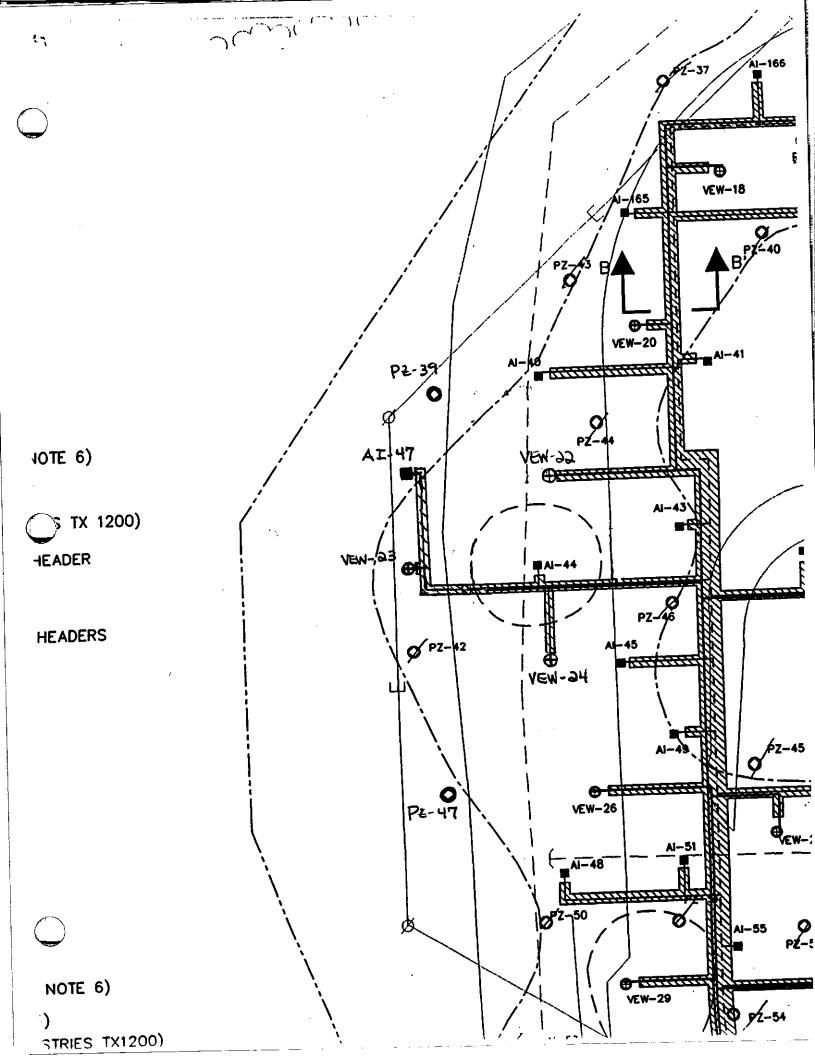
FIELD MODIFICATION DIRECTIVE No.: 8 **GENERAL** Date of Work: Field Modification No.: ____ Day _____ of Work Activity ____ FIELD MODIFICATION air injection wells AI-71 and of filter building these wells can be of MOYEC ft to the north-northeast COMMENTS -H:A commented during design review that nese wells may create a to vacuum MIH believes the elimination of solve these problems. ESTRACTED LABOR To have M'LARIN/HART be AWARE of footings foundation Flements in the Area. **ESTIMATED MATERIAL** None

None	TED EQUIPMENT
Cost of 2 AI well	SCONTRACTOR COSTS
Interior AIW -	(\$381)
E	/ 1 000
_ txterior .AIW	(\$298)
Total Redu	(#(10)
rold(Nedo	ctron - (\$679)
	PROVAL
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the	
Contractors own risk. If the field modificat	ion is not accepted by the Owner, the Contractor will be
responsible for measures necessary to correct	t the construction activities. The Contractor may choose to
proceed with other approved construction activ	vities during the Owner/Owner's Representative review of the
proposed field modifications. The Owner/O	Iwner's Representative will make reasonable attempts to
resolve/review field modifications in a timely r	manner.
Contractor (Company) Mclaven/H	
Contractor (Company) / Claven / L	
	art
Name (Print) Kobert Delisto	Signature Rolet Office
Name (Print) Kobert Delisto	Signature
Name (Print) Kobert Delisto Title (Print) Proj. Engineer	Signature
Name (Print) Kobert Delisto Title (Print) Proj. Engineer Subcontractor (Company)	Date & Time
Name (Print) Kobert Delisto Title (Print) Proj. Engineer Subcontractor (Company) Name (Print)	Date & Time
Name (Print) Kobert Delisto	Date & Time
Name (Print) Kobert Delisio Title (Print) Proj. Engineer Subcontractor (Company) Name (Print) Title (Print) P America, Inc.	Date & Time
Name (Print) Kobert Delisio Title (Print) Proj. Engineer Subcontractor (Company) Name (Print) Title (Print) P America, Inc.	Date & Time
Name (Print) Kobert Delisio Title (Print) Proj. Engineer Subcontractor (Company) Name (Print) Title (Print) P America, Inc.	Date & Time
Name (Print) Kobert Delisto Title (Print) Proj. Engineer Subcontractor (Company) Name (Print) Title (Print)	Date & Time

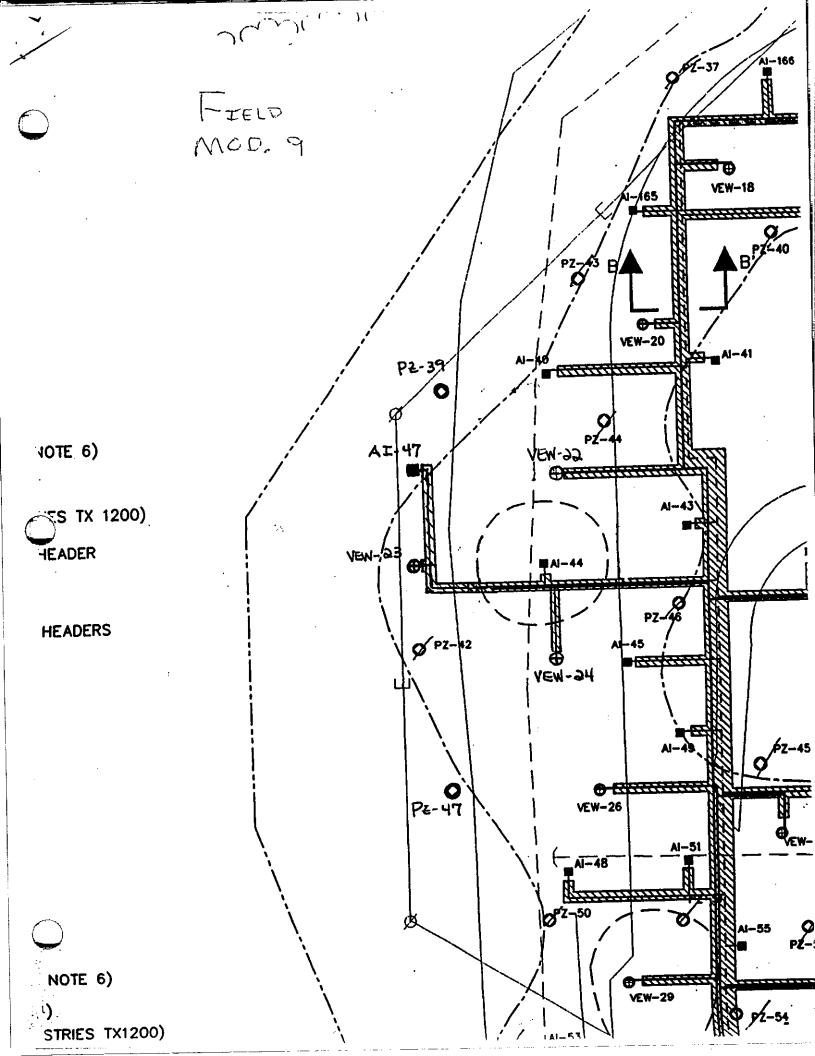
No.:

GENERAL Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity _____ FIELD MODIFICATION Sée_ of well movements COMMENTS 43' West moved VEW - 23 moved VEW - DY 10' east moved VEW - 22 PH - IA moved PZ - 47 moved ESTIMATED LABOR None ESTIMATED MATERIAL None

ESTIMATED SUBCONTRACTOR COSTS NOAR
None
Nove
Nove
Nove
None
None
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.
Contractor (Company) McLaren Hart
Name (Print) Robert Delisio Signature Roll & Office (Print) Proj Engineer Date & Time // 22/93 0945
Subcontractor (Company)
Name (Print) Signature
Title (Print) Date & Time
BP America, Inc. Jame (Print) Susan L. Boyle Signature



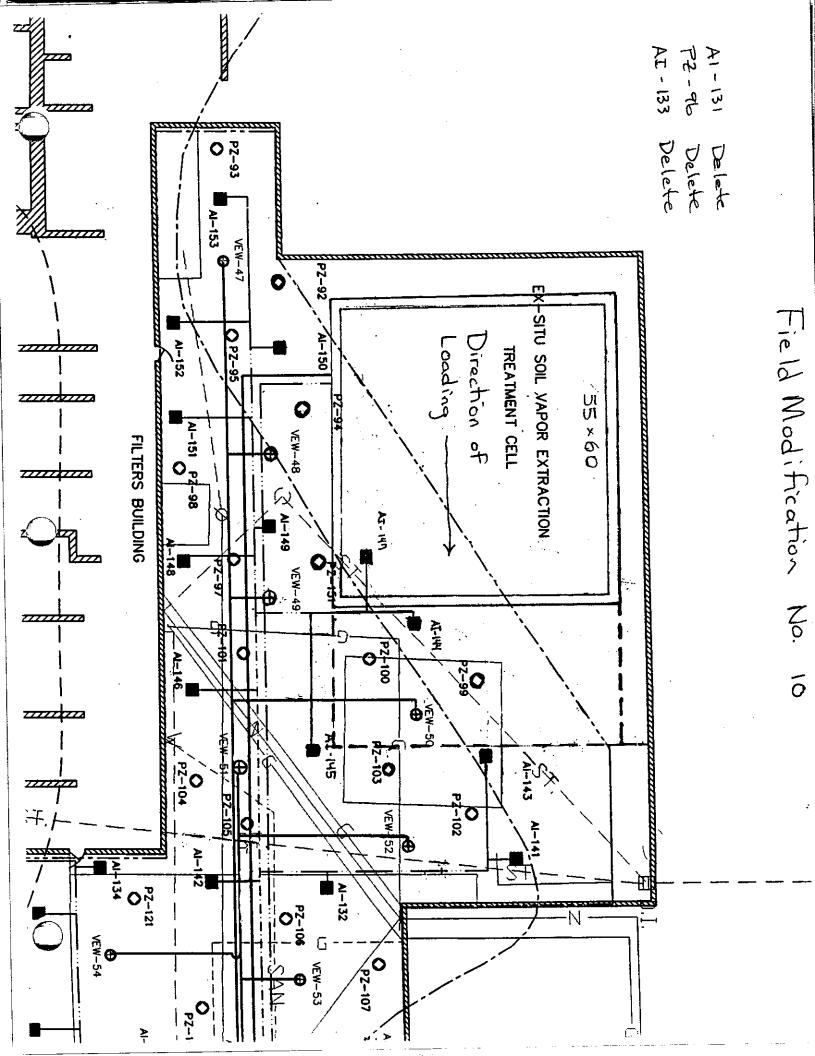
No.: GENERAL Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity _____ FIELD MODIFICATION · uell movements COMMENTS -43' West moved VEW - 23 VEW - 24 moved 10' east VEW - 22 moved PH - IA moved PZ - 47 moved **ESTIMATED LABOR** None ESTIMATED MATERIAL None



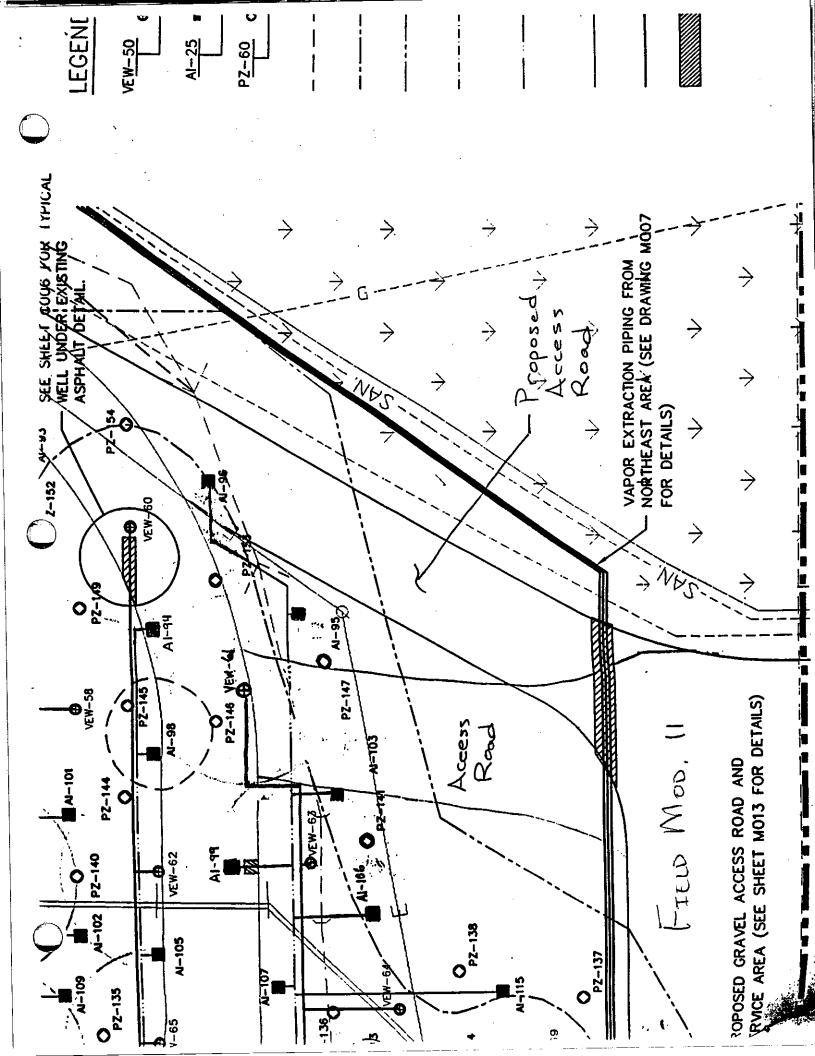
No.:

GENERAL		
Field Modification No.: Date of Work:		
Day of Work Activity		
FIELD MODIFICATION		
Redesign of well field in courtyard to		
allow for expansion of ex-sity cell.		
The effective cover area will not be		
changed. Two air injection wells and		
1 and a make will be eliminated to		
l III Caller Member and 1811 Over 1920. I		
Con allegiand drawing the details at well		
movements. Eliminate upils AL-131, 12-133		
and P2-96.		
P2-92 moved 5 South		
AI-150 moved 6' South		
C		
10 11.		
PZ-151 moved 7' West; 6 South		
AI-144 Moved Il' South; 2' West		
ESTIMATED LABOR		
VEW-50 moved 4' South; 3' East		
AI-145 moved 12' East		
PZ-103 moved 6' North		
vew-51 moved 2' East.		
VEW-52 moved 7' North; 2 tast		
AI-143 moved 5' South; 2' West		
AI-142 moved 9' East; 4' North		
ESTIMATED MATERIAL		
None		

And D. HAGEN	
tellouing consul, w/ W. HARDISM	
Date & Time 1/3/94 1035	Title (Print) Const Mant
Signature Signature	Name (Print) D. Nostrant
11000	BP America, Inc.
Pate & Time	Title (Print)
Signature	Name (Print)
	Subcontractor (Company)
emit & sted	Title (Print) Project Engineer
Signature Ask Delt.	Name (Print) Kobert Delisio
IN	Contractor (Company) MC Caresy Ho
+ .	11/1221/201
ner.	nem ylamit s ni znoitscitibom bleit weiverlevolveser
er's Representative will make reasonable attempts to	proposed rield modifications. The Owner/Own
s during the Owner\Owner's Representative review of the	Proceed with other approved construction activitie
e construction activities. The Contractor may choose to	DICEORD OF A PROPERTY OF CONTROL OF CONTROL CO
is not accepted by the Owner, the Contractor will be	HOURDANIE OF THE ONLY IN THE PROPERTY OF SHIP STORY
of the proposed field modification, it is done so at the	Contractors own risk if the field modification
the proposed the confidence with constituction	of the above noted change during the review
Contractor. If the Contractor proceeds with construction	1
IAVC), JRSGA
(618 8) -	vortional Reduction
316# = 13tomo520g	COST OF 1 DREUMATIC
8P6 # ←——	2119W JA 6 to 120)
STSOO ROLLE	ESTIMATED SUBCO
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	Jone



No.: GENERAL Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity _____ FIELD MODIFICATION of wells in southeas relocation area. moist for details of well movem COMMENTS -7' North west moved West VEW - b1 moved 10' West 0 AI - 106 moved west PZ - 141 Moved west moved AI- 103 East RAI - 95 moved 7.5' East TP1 - 54 x moved Moved ESTIMATED LABOR North P2-153 moved ESTIMATED MATERIAL None



FIELD MODIFICATION DIRECTOR	No.:
GENERAL Field Modification No.: Date of Work: Day of Work Activity	
Mclaven/Hart will use a flowable material instead of sand to backs around pipes during filters building trenching. This material will be up to 6" below ground surface Due to inpermablety of the flowable ground the Reef Industries be used (RCB 1-13-94)	poured
Differences in cost of this backfill men will be detailed at a later date. sub y	4nod 113/19
ESTIMATED LABOR	
None Estimated Material	

ESTIMATED EQ	UIPMENT
None	
ESTIMATED SUBCONT	TRACTOR COSTS
None	
•	
of the above noted change during the review of Contractors own risk. If the field modification responsible for measures necessary to correct the	Contractor. If the Contractor proceeds with construction of the proposed field modification, it is done so at the is not accepted by the Owner, the Contractor will be a construction activities. The Contractor may choose to a during the Owner/Owner's Representative review of the er's Representative will make reasonable attempts to
Name (Print)	Signature
Title (Print)	Date & Time
BP America, Inc. Name (Print) Susan L. Boy/e Title (Print) Construction Manage	Signature

FIELD MODIFICATION SILEOTTE	No.:
GENERAL	
Field Modification No.: Date of Work:	
Day of Work Activity	
11 laista los (18)	cks ate a e used industrier bags
cell itself will act as the barrier.	
Cost differences for the modifications in design will be determined at a lateral	date 1/1
ESTIMATED LABOR	
None	. · ·
1 43/2	
·	
ESTIMATED MATERIAL	<u></u>
ESTIMATED MATERIAL	
None	

ESTIMATED EQU	IPMENT
None	
ESTIMATED SUBCONT	RACTOR COSTS
ESTIMATED SUBCONT	1
None	
of the shove noted change during the review of	contractor. If the Contractor proceeds with construction the proposed field modification, it is done so at the
Contractors own risk If the field modification is	s not accepted by the Owner, the Contractor will be
responsible for measures necessary to correct the	construction activities. The Contractor may choose to
proceed with other approved construction activities	during the Owner/Owner's Representative review of the r's Representative will make reasonable attempts to
resolve/review field modifications in a timely mani	
	L
Contractor (Company) McLaren Her	1 Part Oak
Name (Print) Kobert Delisis	Signature Control of the Signature
Title (Print) Project Engineer	Date & Time
Subcontractor (Company)	
Name (Print)	Signature
Title (Print)	Date & Time
BP America, Inc. Susan L. Boyle	Signature Susan Bla
Name (Print) Susan L. Boyle Title (Print) Construction Mgr.	Date & Time
Title (Print) Construction 119	777

No.: **GENERAL** Field Modification No.: 14 Date of Work: 3-11-94 Day _____ of Work Activity _____ FIELD MODIFICATION Due to the manufacturers recommendation and son conditions soil compaction will not be done in area's to COMMENTS -All areas to be covered will be free of track or tire ruts or sudden changes in elevation. to be involved in final soil prior to placement of ast considerations, if any, will be determined at a later date. **ESTIMATED LABOR ESTIMATED MATERIAL**

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ESTIMATED E	QUIPMENT
ESTIMATED SUBCON	TRACTOR COSTS
APPRO	
of the above noted change during the review of Contractors own risk. If the field modification is responsible for measures necessary to correct the proceed with other approved construction activities	Contractor. If the Contractor proceeds with construction of the proposed field modification, it is done so at the is not accepted by the Owner, the Contractor will be construction activities. The Contractor may choose to aduring the Owner/Owner's Representative review of the er's Representative will make reasonable attempts to the ner.
Contractor (Company) McLoven Hart Name (Print) Richard C. Backen Title (Print) Prof. 5 p.	Signature 1 CRocks Date & Time 3-8-94 1630
Subcontractor (Compary) Name (Print) Title (Print)	Signature Date & Time
BP America, Inc. Name (Print) Susan L. Boyle Title (Print) Construction Mg(Signature

No.: GENERAL _____ Date of Work: ___ 3 /18 /94 Field Modification No.: Day _____ of Work Activity _____ FIELD MODIFICATION Process and Instrumentation Diagrams (P&IDs, 1007, and 1007 me COMMENTS ESTIMATED LABOR ESTIMATED MATERIAL

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<u> </u>
RACTOR COSTS
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Contractor. If the Contractor proceeds with construction if the proposed field modification, it is done so at the is not accepted by the Owner, the Contractor will be a construction activities. The Contractor may choose to a during the Owner/Owner's Representative review of the er's Representative will make reasonable attempts to oner.
Signature Kicha C Decler
Date & Time 3-24-94 1200
Signature
Date & Time

No.: Day _____ of Work Activity _____ FIELD MODIFICATION Process and Instrumentation Diagrams show instrument and process change COMMENTS ESTIMATED LABOR ESTIMATED MATERIAL

FIELD MODIFICATION DIRECTIVE No.:
GENERAL Field Modification No.: 16 Date of Work: 3-24-94 Day of Work Activity
Add on to VES Sampling trailer. Princing network for Vapor extraction well manifold system is too large to fit in trailer. MIH will add on wooden section to accommodate additional piping. Trailer is 2 foot other than drawn indicated and 2 foot shorter in wideth.
Addition to VES trailer will be to at no extra Cost to BP Oil SCB 3/25/94 PCB 3/25/94
ESTIMATED LABOR
ESTIMATED MATERIAL

ESTIMATED	DEQUIPMENT
ESTIMATED SUBCO	ONTRACTOR COSTS
Of the above noted change during the review Contractors own risk. If the field modification responsible for measures necessary to correct the proceed with other approved construction activities	contractor. If the Contractor proceeds with construction of the proposed field modification, it is done so at the is not accepted by the Owner, the Contractor will be a construction activities. The Contractor may choose to as during the Owner/Owner's Representative review of the per's Representative will make reasonable attempts to
Contractor (Company) M Charen Hart Name (Print) Kichard C Beckan Title (Print) Proj - Sup	Signature Ruband (Becky Date & Time 3.74-44 1200
Subcontractor (Company) Name (Print) Title (Print)	Signature
SP America, Inc. Name (Print) Susant. Boyle Title (Print) Sime coordwand	Signature

No.:

Date of Work: 3-24-94 Field Modification No.: 16 Day _____ of Work Activity_ FIELD MODIFICATION arade COMMENTS for the integrity of the addition of ESTIMATED LABOR Addition to the VES trailer will be at no extra east to BP OIL **ESTIMATED MATERIAL**

<u>ES</u>	STIMATED EQUIPMENT
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ESTIMATE	ED SUBCONTRACTOR COSTS
<u></u>	APPROVAL
Con ractors own risk. If the field more responsible for measures necessary to proceed with other approved construction proposed field modifications. The Overesc ve/review field modifications in a temporary construction of the	
tractor (Company) M. Charen Hart	6
ne (Print) Richard (Becken	Signature Vicka C Beefer
(Print) Proj. Sup	Date & Time 374-94 1206
contract r (Company)	
e (Print:	
(Print)	
•	Date & Time
merics, inc.	
e (Print: Susan L. Boyle	Signature Slevan Solo
(Print) Site Coordinator	Date & Time 4/14/94 1550 he
	- 15 50 Ma.

No.:

GENERAL Field Modification No.: 16 Date of Work: 3-24-94 Day _____ of Work Activity _____ FIELD MODIFICATION COMMENTS -Addition to VES trailer will bet at no extra Cost **ESTIMATED LABOR** ESTIMATED MATERIAL

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<u>E</u>	STIMATED SUBCONTRACTOR COSTS	
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APPROVAL		
Construction activities are the	e responsibility of the Contractor. If the Contractor proceeds with construction	
of the above noted change	during the review of the proposed field modification, it is done so at the ne field modification is not accepted by the Owner, the Contractor will be	
responsible for measures ne	cessary to correct the construction activities. The Contractor may choose to	
proceed with other approved construction activities during the Owner/Owner's Representative review of the		
proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to		
resolve/review field modifica	ations in a timely manner.	
Contractor (Company) McLane	en Hart	
Name (Print) Richard C Be	signature Richard Checker	
Title (Print) Pro - Sup		
Subcontractor (Company)	Signature	
Name (Print)	A	
Title (Fillit)		
BP America, Inc.	Signature Jusunt of the	
Name (Print) Susant. B. Sittle (Print) Sittle (OORD)	Signature 7 7 27 911 1540 bic	
Title (Print) SITE COORD	Date & Time 3-25-94 154065-	
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No.:

	Field Modification No.: 16 Date of Work: 3-24-94	1
١,	Field Modification No.: 16 Date of Work: 0 57	
;	Day of Work Activity	1
	Add on to VES Sampling trailer. Piping	
	- Add with the state of the warmen	
1	The total in the title in the t	
	add on usoden section to	
	additional to be widether	1
1	shorter than drawn and another avoid	1
1	lar Dager 13 Jan 190 the Roll Roding). Oxterior	
1	water ill he point at a later out and and	T12E
H	Addition to VES trailer will be to at no extra Cost to Bloic Sch 3/25/94 RCB 3/25/94	eatment
Ì	Addition to VES trailer will be # 27	syp (C)
	to BP Oil SCB 3/25/94	- [
	malama Hart is responsible for integrity of	l l
	exterior of VES trailer and addrove welling	
	throughout life of remediation system sib 4/12/44	
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-	ESTIMATED LABOR	1
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	TO MATERIAL	
	ESTIMATED MATERIAL	
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ESTIMA	ATED EQUIPMENT
ESTIMATED SU	JBCONTRACTOR COSTS
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of the above noted change during the revi Contractors own risk. If the field modificate responsible for measures necessary to corresponded with other approved construction act	of the Contractor. If the Contractor proceeds with construction iew of the proposed field modification, it is done so at the ation is not accepted by the Owner, the Contractor will be contraction activities. The Contractor may choose to tivities during the Owner/Owner's Representative review of the Owner's Representative will make reasonable attempts to manner.
Contractor (Company) Mcharen Hart	
Name (Print) Kichard C Beckan Title (Print) Proj - Sup	Signature (Locky
Subcontractor (Company)	
Name (Print)	Signature
Fitle (Print)	Date & Time
BP America, Inc.	1 43 n.
Vame (Print) Susanz. Boyle Title (Print) Sittle COORDWATOR	Signature
THE COOKDINTTOOK	Date & Time 3-25-94 1540hrs

No.: **GENERAL** Field Modification No.: 17 Date of Work: 3.28-94 Day _____ of Work Activity _____ FIELD MODIFICATION Cover material over Bento Mot will be #/ Runner of Cousher stone instead of local soil because of weather conditions soil is not manageable. THE "I SPORE WILL PURED ON MAT IN APROXIMATELY 311 LIFTS. THE SAPORTS FOR THE MAIN PINE RUDS WILL HAVE AN ADDITIONAL 4" (APREND) OF STONE & BASE. THE ENLANCE OF THE COVER WILL BE PURCH AT A LATERDATE (12. WIREN WENTITED IS MORK SUITABLE). THE ADJA WILL BE RETURN TO CONSUMN AS RED-INE By OIL CONTENT The second layer of cover will be soil faid in a oppr. 3"/ift. COMMENTS -HAD TO UTHIZE STUTE TO MAIN MAIN SCITEDILE, SON CONTRACT IS NOT USED AS FILL THIS FRALY IN THE CONSTANT SEASON DUE TO HIGH PROSILITY OF FIRM EVENTS. ESTIMATED LABOR SAME LABOR IS PEQUED D PORE GONE A WOULD BE REGIMED TO PLACE SOIL FILL. THE CONSTRUME WILL BE PLACEDED THE BONTOMAT COVER. ESTIMATED MATERIAL THE STORE COST'S IS AMADIMATELY 6.00/ TON MOLE THAT THE SUIT.

ESTIMATED	EQUIPMENT
SAME EDUPMENT REQUIRE TO PURE	STONE AS PUPLED TO PLACE SOIL
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	ONTRACTOR COSTS
SAME AS REPURED TO PIECE SOIC.	
responsible for measures necessary to correct proceed with other approved construction activities.	the construction activities. The Contractor may choose to ties during the Owner/Owner's Representative review of the wner's Representative will make reasonable attempts to nanner.
reactor (Company) _ M/H	
Be (Print) Richard C Becken	Signature Slepa C Best
(Print) Proj. Sup.	Date & Time 3-30-94 1530
Reportractor (Company)	
(Print)	Signature
(print)	Date & Time
estime!	
America, Inc.	Somme She
lame (Print) <u>Jusan L. Livik</u>	Signature
the (Print) Site Coordinator	Date & Time 4/13/94 /960/hrs

No.: **GENERAL** Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity _____ FIELD MODIFICATION MIH will change 10" HDPE gravity feed discharge system w/ weir Flow control and metering 6" PVC pressure system w/ dual a magneter. COMMENTS trenchina and earthwork blda. Due to the underground utilities associated w this routing, MIH ESTIMATED LABOR could not technically gravity feed from the bldg to the SPDES outfall. Therefore, a pump system was required to discharge safet from the treatment building. a pressurized system a determined to be adequate to convey the required How. A ESTIMATED MATERIAL 2-5 Hp Aurora Pumps (P810 A&B) interior Piping as per revised PCID (F.M. 15) Controls as 'Der revised PETD (F.M. 15)

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	ESTIMATED EQUIPMENT
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ES	TIMATED SUBCONTRACTOR COSTS
-Change Ore	les amounts to be determined
	1
Construction is not	APPROVAL
Confractors own ask. If the responsible for measures neces proceed with other approved con	esponsibility of the Contractor. If the Contractor proceeds with construction uring the review of the proposed field modification, it is done so at the field modification is not accepted by the Owner, the Contractor will be sary to correct the construction activities. The Contractor may choose to instruction activities during the Owner/Owner's Representative review of the The Owner/Owner's Representative will make reasonable attempts to its in a timely manner.
Contractor (Company)	
lame (Print)	Signature
itle (Print)	Date & Time
ubcontractor (Company)	
	Signature
tle (Print)	Date & Time
P America, inc.	
arne (Print)	
tle (Print)	Date & Time
•	•

FIELD MODIFICATION DIRECTIVE No.: Date of Work: <u>5-04-94</u> Field Modification No.: -18Day _____ of Work Activity _____ FIELD MODIFICATION in the same COMMENTS he original Field Mod 18 was written and signed by ESTIMATED LABOR **ESTIMATED MATERIAL**

	<u> </u>
T-44-0-0-10-10-10-10-10-10-10-10-10-10-10-10	any to be determined at a PUB 5/11/24
Con ractors own itsk. If the field modification responsible for measures necessary to correct to proceed with other approved construction activities.	he Contractor. If the Contractor proceeds with construction of the proposed field modification, it is done so at the n is not accepted by the Owner, the Contractor will be the construction activities. The Contractor may choose to ties during the Owner/Owner's Representative review of the mer's Representative will make reasonable attempts to anner.
intractor (Company) McLaren Hart Ima (Print) Kichard C Becken Proj. Sup	Signature Luhan C Becker
	Date & Time 5-11-94 0845
bcontract ir (Company)	-
me (Print:	Signature
me (Print:	Signature

FIELD MODIFICATION DIRECTIVE No.: GENERAL Field Modification No.: _____ Date of Work: _____ Day _____ of Work Activity _____ FIELD MODIFICATION replace 10" HDPE gravity oroundwater COMMENTS -ESTIMATED LABOR **ESTIMATED MATERIAL** 2-5 HP pumps P-810 A, B

ESTIMATED EQ	UIPMENT
ESTIMATED SUBCONT	TRACTOR COSTS
Change Order amo	buts to be determined
Contractors own risk. If the field modification responsible for measures necessary to correct the proceed with other approved construction activities	Signature Rehard & Beelin
Subcontractor (Company) Name (Print) Title (Print)	Signature
BP America, Inc. Name (Print)	•

No.: GENERAL Field Modification No.: 19 Date of Work: 4-1-94 Day _____ of Work Activity _____ FIELD MODIFICATION complete wells VEW-23 and abovegroun **COMMENTS ESTIMATED LABOR** ESTIMATED MATERIAL

	FIELD MODIFICATION DIRECTIVE (continued) #19 pg 2
	ESTIMATED EQUIPMENT
A SECTION AND A	
1	ESTIMATED SUBCONTRACTOR COSTS
1100	ESTIMATED SOUPERING
2 A	
	APPROVAL
	Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction
	of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be
	Contractors own risk. If the field modification is not accepted by the Contractor may choose to responsible for measures necessary to correct the construction activities. The Contractor may choose to
	proceed with other approved construction activities during the Owner/Owner's Representative review of the
	proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to
	resolve/review field modifications in a timely manner.
	Mclaren Hart
	Rontractor (Company) WCCOren Walter Signature Richard C Backen Signa
	Title (Print) Proj. 1 Sup. Date & Time 3-31-94 0745
	Subcontractor (Company) Signature
	Name (Print) Signature Date & Time
	BP America, Inc.
	(Name (Print) Susan A. Doyle Signature & Man 14/5h/8
具	Title (Print) <u>Jife Coor V. Ina. 707</u> Date & Time

FIELD MODIFICATION DIVIDED No.:
Field Modification No.: Date of Work: April 4 1994 Day of Work Activity
MIH will use concrete saw to break through concrete pad encountered during trenthing in the south area. A delay was encountered for a laborer an operator and backhoe. Delay time was 1/2 hours on Monday, April 4, 1994
Concrete disposal will be addressed @ later date
ESTIMATED LABOR 1 Laborer - 1/2 hours Ass't Engineer - 1/2 hours
ESTIMATED MATERIAL

20 pg 2 FIELD MODIFICATION DIRECTIVE (continued)

Concrete Saus - Tiv	oulpment to be determined			
ESTIMATED SUBCON	TRACTOR COSTS			
APPROVAL				
Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.				
Name (Print) Richard C Becken Title (Print) Roy Sup.	Signature Land Recher Date & Time 4-4-94 1700			
Subcontractor (Company) Name (Print) Title (Print)				
BP America, Inc. Name (Print) Susan L. Boyk Title (Print) Si te Casadina to C	Signature			

CONSTRUCTION QUANTITY SUMMARY FOR FIELD MODIFICATIONS / CHANGE ORDERS

errone Inc. Material: Firm	Portable Hand Saw Description	/4 (4 5) Amount/Volume
Equipment: Firm errone Inc. errone Inc. errone Inc.	Description 225 Trackhoe CAT 426 Backhoe (4WD) Concrete Saw	Hours/Days 1/a (4/5) 1/4 (4/5) 1/2 (4/5)
Labor: Firm errone Inc. errone Inc.	Employee Class. (i.e. foreman, operator, laborer) Laborer Operator	Hours 3 ³ / ₄ (4 5) 3/ ₄ (4 5)
Dates of Activity: Field Mod No.: (if applicable) TIME AND MATERI	ALS SUMMARY	
Activity:		

CONSTRUCTION QUANTITY SUMMARY FOR FIELD MODIFICATIONS / CHANGE ORDERS

7	This form is meant to be filled out by contractor and owner's representative field staff. Will be used as an informal agreement of time and materials utilized during implementation of any design modification or change				ı ange
	order.		(-	alabaseant	ered
	Activity:	Removal of a during constr	oncrete uction.	SIAD CHOOSE	
	Dates of Activity:	4 - 4 5 94			
•	Field Mod No.: (if applicable)	_30	~	:	
	TIME AND MATER	IALS SUMMARY		•	
	<u>Labor</u> : Firm	Employee Class.	.hover)	Hours	
_	Gerrone Inc.	(i.e. foreman, operator, la	worer)	1.5 (4/4)	
	errone Inc.	Laborer	•	1.5 (4/4)	
M	Iclaren/Hart	Engineer		1.5 (414)	
)				
	Equipment:			Hours/Days	
C	Firm Errone Inc.	Description CAT 426 Backho	ce (4WD)	1.5 (414)	
•					
	<u>Material</u> : Firm	Description		Amount/Volume	
	Comments:				<u></u>
	Signature/Date Contractor:	My Laren Hart Kehand C Becker	Owner's Rep.:_	•	
		-			

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No.: Field Modification No.: 4-5-94 Day _____ of Work Activity _____ FIELD MODIFICATION COMMENTS -ESTIMATED LABOR ESTIMATED MATERIAL

EST	TIMATED EQUIPMENT			
ESTIMATED SUBCONTRACTOR COSTS				
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APPROVAL				
Construction activates are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own lisk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may choose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.				
Contractor (Company) Mc Laren Name (Print) Richard C Becken Title (Print) Proj. Syp	Hant Signature Vicha 1 C Stelen Date & Time 44-5-74 0830			
Subcontractor (Company) Name (Print) Title (Print)	Signature			
BP America Inc. Name (Print) Susan L. Bry. Title (Print) Site Courdinate	leSignature			
· ·				

No.: GENERAL Field Modification No.: 22 Date of Work: 4-4-94 Day _____ of Work Activity _____ FIELD MODIFICATION COMMENTS be placed above around **ESTIMATED LABOR ESTIMATED MATERIAL**

	ESTIMATED EQUIPMENT	
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-	ESTIMATED SUBCONTRACTOR COSTS	
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	APPROVAL OF THE PROPERTY OF TH	
<u>ر</u>	Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be Contractors own risk.	
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	Contractors own risk. If the field modification is not accepted by the Owner of the Contractor may choose to responsible for measures necessary to correct the construction activities. The Contractor may choose to responsible for measures necessary to correct the construction activities during the Owner/Owner's Representative review of the	
ì	responsible for measures necessary to correct the construction activities. proceed with other approved construction activities during the Owner/Owner's Representative review of the	
	proposed field modifications. The Owner/Owner street	
	resolve/review field modifications in a timely manner.	
	Melace Hart	
	Contractor (Company) McLarer Nart Name (Print) Kichard C Becker Signature Cahal C Geder Title (Print) Project Sup. Date & Time 4-4-94 1620	
	Name (Print) Kichard (Becker Signature 4-4-94 1620	
	Subcontractor (Company) Signature	
	Name (Print) Date & Time	
	Title (Print)	
	RP America, Inc.	
F	Name (Print) Susan. L. Doyle Signature 4-12-94 1355hs.	
	BP America, Inc. Name (Print) Susan L. Boyle Signature Signature 4-12-94 1355hs. Title (Print) Site Coordinatol Date & Time 4-12-94 1355hs.	

	ESTIMATED EQUIPMENT
-	ESTIMATED SUBCONTRACTOR COSTS
-	<u>APPROVAL</u>
	Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted change during the review of the proposed field modification, it is done so at the Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be responsible for measures necessary to correct the construction activities. The Contractor may chaose to proceed with other approved construction activities during the Owner/Owner's Representative review of the proposed field modifications. The Owner/Owner's Representative will make reasonable attempts to resolve/review field modifications in a timely manner.
	Contractor (Company) Milesen Hant Signature School Checken
	Name (Print) Kir hard Becket
	Title (Print) Project Sup Date & Time 7-4-14
	Subcontractor (Company) Signature
	Name (Print)
	Title (Print)
	BP America, Inc.
	Name (Print) Signature
	Title (Print) Date & Time

RFDDATE_4(4)94	- McLAREN / HART	PAGE
SUBJECT		JOB NO
	PW1	
interior and a second		
Shaded	Gontrol Filters Bi	hilding
Panel	101	3
Well a	nd \	
Blave	r Panels	Air Inject Blower & Po
		Blower & Pa
- - - - - - - - - - - - -		
PW-1		
Well Vau	l T	
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		• • • •
	- Existing Ab	predioning
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BY RFD DATE 4494 McLAREN / HART PW-2 Air Injection 3tower FPad Shaded Control Panel for Well PW-2 Well Yoult and Blower Panels Manufacturing Building

GENERAL Field Modification No.: 25 Date of Work: 4-11-94 Day _____ of Work Activity _____ FIELD MODIFICATION COMMENTS . **ESTIMATED LABOR** ESTIMATED MATERIAL

<u>est</u>	IMATED EQUIPMENT
ESTIMATED	SUBCONTRACTOR COSTS
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of the above noted change during the Confractors own in k. If the field modifications responsible for mercures necessary to compromed with other approved construction proposed field modifications. The Ownessive/review field modifications in a time.	
Contractor (Company) Mc Laren Ha	t
Name (Print) Richard C Becken Title (Print) Prof. Sup.	Signature Ruhand C Becken Date & Time 4-11-94 1600
Subcontractor (Company)	
Name (Print:	
Title (Print)	Signature Date & Time
BP America, inc.	
Jame (Print:	Cianatura
itle (Print)	
	Date & Time
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rage continued:

ESTIMATED EQUIPMENT		
ESTIMATED SUBCON	TRACTOR COSTS	
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Construction activities are the responsibility of the Contractor. If the Contractor proceeds with construction of the above noted charge during the review of the proposed field modification, it is done so at the		
•	is not accepted by the Owner, the Contractor will be	
· · · · · · · · · · · · · · · · · · ·	e construction activities. The Contractor may choose to	
proceed with other caproved construction activities	es during the Owner/Owner's Representative review of the	
proposed field modifications. The Owner/Own	ner's Representative will make coasonable attempts to	
resolve/review fiel i modifications in a timely ma	nner.	
Contractor (Company) McLaren Hart	_	
Name (Print) Richard C Becken	Signature Lukand C Becken	
Title (Print) Prof. Sup.	Date & Time 4-11-94 160c	
1		
Subcontractor (Company)		
Name (Print)	Cianatura	
Title (Print)		
į	Date & Time	
BP America, inc.		
BP America, Inc. Name (Print: Susan L. Boyk		
BP America, inc. Name (Print) Susan L. Boyk Title (Print) Site Corrdinator	Date & Time	

No.: **GENERAL** Field Modification No.: ____26 _____ Date of Work: Day _____ of Work Activity _ FIELD MODIFICATION 100 Hp Vacuum dimensions ſΣ 20 **COMMENTS** 1058 1.028 **ESTIMATED LABOR ESTIMATED MATERIAL**

<u>ESTIMATED</u>	EQUIPMENT
ESTIMATED SUBÇOI	VTRACTOR COSTS
APPRO	
of the above noted change during the review of Contractors own dish. If the field modification responsible for measures necessary to correct the proceed with other approved construction activities	Contractor. If the Contractor proceeds with construction of the proposed field modification, it is done so at the is not accepted by the Owner, the Contractor will be a construction activities. The Contractor may choose to a during the Owner/Owner's Representative review of the ear's Representative will make mason ble attempts to mer.
Contractor (Company) Mclaren Har	[
Name (Print) I chard C Becker	Signature Cha De Rech
Title (Print) Proj Sup	Date & Time 4-25-94 1545
Subcontractor (Company)	
Name (Print)	Signature
Title (Print)	Signature Date & Time
BP America, Inc.	
Name (Print: Susan L. Boyle	Signature Signature
Title (Print) Ste Coordinator	Date & Time 5-3-94 11 336-
· · · · · · · · · · · · · · · · · · ·	

No.:

GENERAL Field Modification No.: 27 Date of Work: 4-14-94 Day _____ of Work Activity _____ FIELD MODIFICATION While trenching in the west area, if the material excavated is unsuitable for backfilling it will then be placed in the exsitu cell and M/H proposes using \$2 ROC stone for backfilling. If the #2 RCC 15 used - M/H would use Reef Industries artice trench instead of just surrounding COMMENTS . Because this is a high traffic area M/H strongly suggests using the best possible backfill to avoid settling problems at **ESTIMATED LABOR** No charge **ESTIMATED MATERIAL** To be determined

ESTIMATED	EQUIPMENT
No change	
-	
<u> </u>	
	ATTA ATTA COCTO
	NTRACTOR COSTS
No change	
	, , , , , , , , , , , , , , , , , , , ,
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APPR	<u>OVAL</u>
Contractors own risk. If the field modification responsible for measures necessary to correct to proceed with other approved construction activity proposed field modifications. The Owner/Ownesolve/review field modifications in a timely many contraction of the	of the proposed field modification, it is done so at the is not accepted by the Owner, the Contractor will be the construction activities. The Contractor may choose to les during the Owner/Owner's Representative review of the mer's Representative will make reasonable attempts to anner.
Contractor (Company) Mc Laven Hart	
Name (Print) Richard C Bucken	
Title (Print) Pioi Sup	_ Signature _ Vicha_ C decker
	Signature
4	
Subcontractor (Company)	Date & Time <u> </u>
Subcontractor (Company)Name (Print)	Date & Time
	Date & Time <u> </u>
Name (Print)	Date & Time <u> </u>
Name (Print)	Date & Time
Name (Print) Title (Print)	Date & Time
Name (Print) Title (Print) BP America, Inc.	Date & Time

No.: **GENERAL** Field Modification No.: B Date of Work: 1-14 thur 1-31-94 Day _____ of Work Activity _____ FIELD MODIFICATION Iters building trenches were repositioned based on field during layout. In order to allow for equipment manueverability several trenches were angled 450 than 90° turns. Branch trenches were excavated 20" wile to allow for pipe installation Fany, will Trench depths were kept as shown except in areas where reduce the continated soil volume **ESTIMATED LABOR** No additional labor **ESTIMATED MATERIAL** None

ESTIMATED EQUIPMENT		
NONE		
	<u> </u>	
ESTIMATED SUBÇON	ITRACTOR COSTS	
None		
	1	
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APPRO	VAL	
-	Contractor. If the Contractor proceeds with construction	
of the above noted change during the review o	f the proposed field modification, it is done so at the	
Contractors own risk. If the field modification is not accepted by the Owner, the Contractor will be		
responsible for measures necessary to correct the	construction activities. The Contractor may choose to	
proceed with other approved construction activities	s during the Owner/Owner's Representative review of the	
• •	er's Representative will make reasonable attempts to	
resolve/review field modifications in a timely man	ner.	
Contractor (Company) M/H		
Name (Brint) Kishas C Franks	Signature Suha Con Book	
Name (Print) Kichard C Becken Title (Print) Proj. Sp	Date & Time <u>5-14-94</u> 0925	
11.95	Joe W 11110	
Subcontractor (Company)		
Name (Print)	Signature	
Title (Print)	Date & Time	
BP America, Inc.		
Name (Print) Susan L. Boyle	Signature Susant Lighte Date & Time 2-14-94 09255.	
Title (Print) Site Courdinator	Date & Time 2-14-94 0925/5.	