

*Week 4/30/92  
0800  
Heiman*

April 21, 1992



**COPY**

EG&G Rocky Flats, Inc.  
Rocky Flats Plant  
Procurement, Bldg. 131  
P.O. Box 464  
Golden, Colorado 80402-0464

ATTENTION: Mr. Steve Heiman  
Subcontract Administrator

SUBJECT: Subcontract PC 84017JB ROCKY FLATS SOLAR POND/PONDCRETE PROJECT  
[WBS 710 PROJECT MANAGEMENT - HALLIBURTON NUS ROCKY FLATS DENVER]  
RF-HED-92-0199

REFERENCE: LETTER; HEIMAN TO ORWIG DATED 28 FEB 92.

Dear Mr. Heiman:

The purpose of this letter is for HALLIBURTON NUS (HNUS) to respond to your referenced request to update the contractual equipment requirements that have changed resulting from the progress made in refining the technical specifications and requirements to design, develop and test a cement-based cleanup process to stabilize the Pondsludge/Pondcrete at Rocky Flats. Attached are the most recent equipment lists that have been generated.

On March 17, EG&G (supported by HNUS) conducted a Regulatory Briefing with the Colorado Department of Health (CDH) to discuss the Solar Pond Sludge Processing Program Status with emphasis on (1) identifying potential regulatory issues and (2) obtain regulatory consensus that the processing steps are valid and conform with Environmental Law. The meeting was successful but did result in impacts on the HNUS Processing Train and Equipment Requirements. On April 6, 1992, it was disclosed that the new processing train would not be completed in time to meet the November 8, 1992 processing date. On April 13, 1992, a meeting was held between EG&G and HNUS technical personnel to discuss a new processing train that could meet the November 8th best efforts contractual agreement.

As you are aware, there is currently a significant disconnect in process costs that is further complicated with the pricing of the equipment costs as shown in Attachment "A" of the contract which bases the cost on Phases as follows:

	<u>EQUIPMENT RENTAL COST</u>
PHASE 1 -	\$ 807,264
PHASE 2 -	\$ 872,344
PHASE 3 -	<u>\$1,005,521</u>
TOTAL	<u>\$2,685,129</u>

*line item  
cont EG & G x 1.5*

The total cost of equipment to be purchased in Phase 1 was estimated on September 9, 1991 to be \$3,540,936. In addition, the Phase 1 statement of work is quite specific "... design, install and test process equipment..." Since detailed design and procurement is required prior to "...install and test," all contract equipment procurement must be performed under Phase 1.

**ADMIN RECCRD**

We have developed four (4) Principal Process Trains as follows:

1. POND SLUDGE PROCESSING TO STABILIZED WASTE, A/B PONDS.
2. POND SLUDGE TO STABILIZED WASTE, C POND AND CLARIFIER.
3. POND CRETE REPROCESSING.
4. SALT CRETE REPROCESSING.

The equipment for the above Process Trains are currently included in the contract as partially in Phase 1 and the rest in Phase 2 and 3. We agreed in our March, 1992 meeting that it would be best to have all equipment procured under Phase 1 since Phase 1 includes the Erection and Testing of the Process Equipment. The following is the new cost of the equipment as it compares with the current contract equipment cost:

	<u>PHASE 1 EQUIPMENT PURCHASE PRICE</u>	
	<u>POND CRETE/SALT CRETE</u>	<u>POND SLUDGE</u>
<i>current to be deleted</i> PROPOSED EQUIPMENT ITEMS ↓	\$2,721,368	\$ 819,568
REPLACED EQUIPMENT ITEMS ↑	<u>7,151,560</u>	<u>4,044,054</u>
DELTA PURCHASE PRICE = a plus	<u>\$4,430,192</u>	<u>\$3,224,486</u>

	<u>PHASE 1 RENTAL COSTS -a)</u>	
	<u>POND CRETE/SALT CRETE</u>	<u>POND SLUDGE</u>
<i>deleted</i> PROPOSED EQUIPMENT ITEMS <i>phase I</i>	\$ 642,623	\$ 164,641
PHASE 2 AND 3 EQUIPMENT	<u>1,005,521</u>	<u>872,344</u>
TOTAL EQUIPMENT PROPOSED	\$1,648,144	\$1,036,985
REPLACED EQUIPMENT ITEMS <i>plus</i>	<u>7,151,560</u>	<u>4,044,054</u>
DELTA RENTAL PRICE	<u>\$5,503,416</u>	<u>\$3,007,069</u>

(a- Rental to begin on the day equipment is delivered to site.

The following equipment cost deletions would be made to the Phase 2 and 3 firm fixed price portions of the contract leaving the costs associated with providing the processing equipment operators, supervisory personnel, laboratory support personnel, laboratory facilities, materials, and fuel to process the pond sludge and pondcrete/saltcrete waste forms:

	<u>PHASE 3 RENTAL COSTS</u>
	<u>POND CRETE/SALT CRETE</u>
PROPOSED EQUIPMENT ITEMS	\$1,005,521
REPLACED EQUIPMENT ITEMS	<u>-0-</u>
DELTA RENTAL PRICE	<u>(\$1,005,521)</u>

	<u>PHASE 2 RENTAL COSTS</u>
	<u>POND SLUDGE</u>
PROPOSED EQUIPMENT ITEMS	\$ 872,344
REPLACED EQUIPMENT ITEMS	<u>-0-</u>
DELTA RENTAL PRICE	<u>(\$ 872,344)</u>

EG&G Rocky Flats, Inc.  
Attention: Mr. Steve Heiman  
Page 3

April 21, 1992

After you have a chance to review this information, we should schedule a meeting (April 29th or 30th?) to discuss specific requirements to (1) incorporate all the equipment cost under Phase 1 and (2) provide the supporting documentation to incorporate the change into the contract.

Please call me during the week of April 27th to schedule the meeting or before if you have any questions.

Sincerely,

HALLIBURTON NUS ENVIRONMENTAL  
CORPORATION



Robert W. Orwig  
Contract Administrator

cc: T. Bittner  
D. Ferrier  
H. Harvey  
J. Schmidt  
J. Zak

A:ALTRAHEIMAN-17  
RF-HED-92-0199

MASTER EQUIPMENT LIST  
 POND SLUDGE BATCH SYSTEM  
 PONDS 207 A&B - ALTERNATIVE 2

S/O	IRG. NO.	EQUIP. NO.	EQUIPMENT NAME	TYPE PROCURE	DESCRIPTION	PUMP TCH PSI	CAPACITY DESIGN NOMINAL	TYP. VENDOR	LOCATION	H.P.	DRIVE TYPE	COST
1	00121	430-P-14	POND WATER RECLAIM PUMP	CONTRACT	27X60" L VERT. CENT. MODEL 2 - SR3-5100	40	125 GPM	LEFCO	207A&B		F/S	W/P - 16
2	00121	430-P-14-M1	MOTOR	CONTRACT	TEFC			LEFCO	207A&B	15.0	F/S	W/PUMP
3	00121	430-S-01	FLUSH WATER TANK	BID	5' DIA X 6' HIGH		1000 GAL		207A&B			\$2,000
4	00121	430-P-02	FLUSH WATER PUMP	BID	3" X 1 - 1/2" - 8" HORZ. CENT.	110	150 GPM	DURRON	207A&B	30.0	F/S	\$5,190
5	00121	430-P-02-M1	MOTOR	BID	TEFC				207A&B			W/SCREEN
6	00121	430-P-16	RECLAIM SYSTEM	CONTRACT	3 STAGE TRAILER BOOM VACUUM PUMP	P.D.	380 GPM	LEFCO	207A&B		DIESEL	\$210,000
7	00121	430-SC-01	SCALPING SCREEN	CONTRACT	4' W X 8' L @ 10 MESH W/ S.D. SCREEN		380 GPM	LEFCO	207A&B		F/S	\$12,000
8	00121	430-SC-01-M1	MOTOR	CONTRACT	TEFC				207A&B	3.0		W/SCREEN
9	00121	430-SU-01	TRANSFER SUMP	BID	5' DIA X 6' HIGH		1000 GAL		207A&B			\$2,000
10	00121	430-A-01	TRANSFER SUMP AGITATOR	BID	XLO-500, A-310 IMPELLER			IGHIWIN	207A&B		V/S	\$1,000
11	00121	430-A-01-M1	MOTOR	BID	TEFC				207A&B	5.0		W/AGITATOR
12	00121	430-P-01	TRANSFER PUMP (2) EACH	BID	4' X 3' HORZ. CENT. MODEL 3 - VR0 - 200	50	400 GPM	GALIGHER	207A&B		V/S	\$7,400
13	00121	430-P-01-M1	MOTOR	BID	TEFC				207A&B	30.0		W/PUMP
14	00122	430-P-03	MIXER FEED PUMP #1	BID	2' - 1/2" X 2' HORZ. CENT. MODEL 2VRA-1000	150	125 GPM	GALIGHER	207A&B		F/S	\$37,500
15	00122	430-P-03-M1	MOTOR	BID	TEFC				207A&B	30.0		W/PUMP
16	00122	430-Z-03	FLOCCULANT FEED SYSTEM #1	BID	FLOCCULANT METERING SYSTEM, MODEL 400	P.D.	1 GPM	NALCO	207A&B		V/S	\$70,000
17	00122	03A	FLOCCULANT MIX SUMP	BID	4' DIA X 4' HIGH				207A&B			SYS COMP
18	00122	03B	FLOCCULANT MIX SUMP AGITATOR	BID	XJO-117, A-310 IMPELLER			LIGHTWIN	207A&B		V/S	SYS COMP
19	00122	03C	FLOCCULANT MIX SUMP PUMP	BID	3" X 1 - 1/2" HORZ. CENT.	30	100 GPM	DURRON	207A&B		F/S	SYS COMP
20	00122	430-W-01	STATIC MIXER #1	BID	2' DIA X 8' ELEMENT MIXER				207A&B			\$800
21	00122	430-K-01	207 AREA AIR COMPRESSOR	LEASE	100 PSI @ 50 ACFM AIR COMPRESSOR		50 ACFM		207A&B			\$10,000
22	00122	430-K-01-M1	MOTOR	LEASE	TEFC				207A&B	15.0		W/COMP
23	00122	430-W-04	PORTABLE SLUDGE VACUUM	EG&G	MODEL # 320 W/1 S YD3 HOPPER AND JACK		2 TPH	EG&G	207A&B			N/C

ATTACHMENT 13

H/6

PONDS 207 A&B - ALTERNATIVE 2

Attachment 1

SIC	DRG NO.	EQUIP. NO.	EQUIPMENT NAME	TYPE PROCURE	DESCRIPTION	PUMP TON PSI	CAPACITY		TYP. VENDOR	LOCATION	H.P.	DRIVE TYPE	COST
							DESIGN	NOMINAL					
24	00122	430 W-04-M1	MOTOR	EG&G	TEFC				EG&G	207A&B	200		N/C
25	00122	430-W-10	NON-HAZARDOUS DUST COLLECTOR	BID				39 CF	FLEXKLEEN	207A&B	10		\$15,000
26	00122	430-W-10A	DUST COLLECTOR FAN	BID									\$2,000
27	00123		MUGMILL	BID									\$100,000
28	00123	430-S-05	THIRTY WATER SEPARATOR	BID	5 DIA X 3' HIGH CYL X 6' DIA X 65 DEG CONE			1090 GAL		207A&B			\$5,000
29	00123	430-P-05	SEPARATOR PUMP	BID	20036G1 - CDO - DAA #2000 PROGRESSIVE CAVITY	50		50 GPM	MOYNO	207A&B	7.5	F/S	\$23,850
30	00123	430-P-05-M1	MOTOR	BID	TEFC					207A&B			W/PUMP
31	00123	430-S-06	PROCESS WATER TANK	BID	5' DIA X 6' HIGH			1000 GAL		207A&B			\$4,400
32	00123	430-P-06	PROCESS WATER PUMP	BID	3' X 1'-1/2' - 8" HORIZ. CENT.	50		150 GPM	DURRON	207A&B		F/S	\$4,731
33	00123	430-P-06-M1	MOTOR	BID	TEFC					207A&B	15.0		W/PUMP
34	00123	430-SU-02	CEMENT FLUSH WATER SUMP	BID	4' DIA X 4' HIGH			300 GAL		207A&B		F/S	\$1,900
35	00123	430-P-07	ELEMENT FLUSH WATER PUMP	BID	2' X 48" L VERT. CENT. MODEL 2 - SR3 - 5100	40		125 GPM	GALIGHIER	207A&B		F/S	\$8,325
36	00123	430-P-07-M1	MOTOR	BID	TEFC					207A&B	15.0		W/PUMP
37	00123	430-G-01	207 AREA ELECTRIC GENERATOR	LEASE	750 KW #12V921A DIESEL ELECTRIC GENERATOR				STEWART	207A&B			\$92,000
38	00123	430-CA-01	CASING. HANDLING & INSPECTION SYSTEM	BID						207A&B			\$50,000
39		430-S-13	SETTLING TANK 1	BID				20,000 GAL	HALLIBURTON	207A			\$70,000
40		430-S-14	SETTLING TANK 2	BID				20,000 GAL	HALLIBURTON	207A			\$70,000
41		430-TH-01	BIOLATY SCREEN THICKENER	BID	MODEL RST 8-3			2 TPH	ANDRIIZ	207A		V/S	\$75,000
42		430-TH-01-M1	MOTOR	BID	TEFC					207A	3		W/SCREEN
43		430-S-04	SLURRY SURGE TANK	BID						207A			\$20,000
44		430-F#-02	HEPA FILTER	BID						207A			\$20,000
45		02A	FAN	BID						207A			W/INTER

5/16

02 - Apr - 92  
12 - Apr - 92

DATA DATE:  
PRINT DATE:

BROWN AND ROOT, INC., JOB NO. JR-1198  
MASTER EQUIPMENT LIST  
POND/SLUDGE BATCH SYSTEM

PONDS 207 A&B - ALTERNATIVE 2

CLIENT: E&O ROCKY FLATS  
MNU/3 JOB NO.: 3157  
REVISION: 7

SEQ	DRG NO.	EQUIP. NO.	EQUIPMENT NAME	TYPE PROCURE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN	CAPACITY NOMINAL	TYP. VENDOR	LOCATION	H.P.	DRIVE TYPE	COST
46		7	FIELD STORAGE BIN	BID	4000 CF HORIZONTAL STORAGE BIN				HALLIBURTON	207A			\$190,000 \$667,488

\* NIC = NO CHARGE

NOTES: F/S = FIXED SPEED  
V/S = VARIABLE SPEED  
MOTORS ARE FIXED SPEED, 480V, 3 PHASE, 60 HZ  
FREQUENCY INVERTERS ARE ASSUMED

1) THE EQUIPMENT DESCRIPTION, CAPACITY AND VENDOR COLUMNS LIST THE TYPICAL OR ENVISIONED INFORMATION FROM THE PROCESS INPUTS. HOWEVER, THE SELECTED CONTRACTOR MAY SUBSTITUTE OR CHANGE OUR PERCEPTION AT WHICH TIME WE WILL REDEFINE SELECTION ACCORDINGLY.

2) ALL EQUIPMENT DESIGNATED AS E&G IS EXISTING OR REQUIRED EQUIPMENT TO BE PROVIDED BY E&G

3) ALL EQUIPMENT DESIGNATED AS "CONTRACT" WILL BE SUPPLIED BY THE RECLAIM CONTRACTOR, LEFCO

4) ALL EQUIPMENT DESIGNATED AS "LEASED" WILL BE CHOSEN BASED ON COMPETITIVE BIDDING

5) THIS EQUIPMENT LIST IS PRELIMINARY ACCORDING TO B & R PFD'S, REV 6, ISSUED 04/07/92

6) THE COSTS WHEN GIVEN ARE PRELIMINARY TELEPHONE BUDGET QUOTES

7) EQUIPMENT IDENTIFIED AS "SOLE" IS SINGLE SOURCE PROCUREMENT

0111

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Attachment 13

CLIENT: EG&G ROCKY FLATS  
HRUS JOB NO. 3157  
REVISION: 7

BROWN & ROOT, INC. - JOB NO. JR-1198  
MASTER EQUIPMENT LIST  
POND SLUDGE BATCH PROCESS  
POND 207C - ALTERNATIVE 2

DATA DATE: 02 Apr 92  
PRINT DATE: 12 Apr 92

SEQ NO	DRG. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY		TYP VENDOR	LOCATION	H.P.	DRIVE TYPE	COSI
							DESIGN	NOMINAL					
1	0013/1	430-S-07	FLUSH WATER TANK	BID	3' DIA X 6' HIGH		1000 GAL		DURIRON	207C			\$2,200
2	0013/1	430-P-08	FLUSH WATER PUMP	BID	3' X 1-1/2' - 8' HORIZ. CENT.	50	150 GPM		DURIRON	207C		F/S	\$3,460
3	0013/1	430-P-08-M1	MOTOR	BID	TEFC					207C	10.0	F/S	W/PUMP
4	0013/1	430-P-15	POND RECLAIM SYSTEM	CONTRACT			390 GPM		LEFCO	207C			\$485,000
5	0013/1	430-P-15-M1	MOTOR	CONTRACT	TEFC					207C			W.SYSTEM
6	0013/1	430-W-03	VACUUM TRUCK SYSTEM (EXISTING)	EG&G					EG&G	207C			N/C
7	0013/2	430-SU-03	SCREEN UNDERSIZE DISCHARGE SUMP	CONTRACT	3' DIA X 6' HIGH		1000 GAL		LEFCO	207C		V/S	\$2,200
8	0013/2	430-A-03	SCREEN UNDERSIZE SUMP AGITATOR	CONTRACT	XLG-500, A-310 IMPELLER				LEFCO	207C		V/S	\$7,500
9	0013/2	430-A-03-M1	MOTOR	CONTRACT	TEFC					207C	5.0	V/S	W/AGITATOR
10	0013/2	430-P-17	SLURRY TRANSFER PUMP	CONTRACT					LEFCO	207C		V/S	\$3,000
11	0013/2	430-P-17-M1	MOTOR	CONTRACT	TEFC					207C			W/PUMP
12	0013/2	430-Z-09	DIC CONTACT CHAMBER	CONTRACT					LEFCO	207A&B			\$5,500
13	0013/3	430-S-12	PROCESS WATER TANK	BID	3' DIA X 6' HIGH		1000 GAL			207A&B			\$2,200
14	0013/3	430-P-12	PROCESS WATER PUMP	BID	3' X 1-1/2' - 8' HORIZ. CENT.	50	150 GPM		DURIRON	207A&B		F/S	\$3,150
15	0013/3	430-P-12-M1	MOTOR	BID	TEFC					207A&B	15.0	F/S	W/PUMP
16	0013/3	430-S-11	DIRTY WATER SEPARATOR	BID	3' DIA X 3' HIGH CYL X 6' DIA X 65 DEG CONE		1090 GAL			207A&B			\$2,700
17	0013/3	430-P-11	SEPARATOR PUMP	BID	2' G036G1-CDO-DAA #2000 PROGRESSIVE CAVITY	50	50 GPM	10 GPM	MOYNO	207A&B		F/S	\$15,900
18	0013/3	430-P-11-M1	MOTOR	BID	TEFC					207A&B	7.5		W/PUMP
19	0013/3	430-SU-04	CEMENT FLUSH WATER SUMP	BID	4' DIA X 4' HIGH		300 GAL			207A&B			\$950
20	0013/3	430-P-13	CEMENT FLUSH WATER PUMP	BID	2' X 48" VERT. CENT. MODEL 2SR3-\$100	40	125 GPM		GALUGHER	207A&B		F/S	\$5,550
21	0013/3	430-P-13-M1	MOTOR	BID	TEFC					207A&B	15.0		W/PUMP
22	0013/3	430-G-02	207 AREA ELECTRIC GENERATOR	LEASE	750 KW #12VW2TA DIESEL ELECTRIC GENERATOR					207A&B			
23	0013/3	430-K-02	207 AREA AIR COMPRESSOR	LEASE	100 PSI @ 180 ACFM AIR COMPRESSOR		180 ACFM		SULLAIR	207A&B			
24	0013/3	430-K-02-M1	MOTOR	BID	TEFC					207A&B	40.0		W/COMP R
25	0013/3	430-W-08	PORTABLE SLUDGE VACUUM	EG&G	MODEL # 320 W/1 5 YD3 HOPPER AND JACK		2 TPH		EG&G	207A&B			N/C

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Official Mark  
02/18/82

CLIENT: EG&G ROCKY FLATS  
 HNUJ JOB NO.: 3157  
 REVISION: 7  
 BROWN & ROOT, INC. - JOB NO. JR-1188  
 MASTER EQUIPMENT LIST  
 POND SLUDGE BATCH PROCESS  
 POND 207C - ALTERNATIVE 2  
 DATA DATE: 02-Apr-82  
 PRINT DATE: 12-Apr-82

SEQ NO.	DRG. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCLURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN	CAPACITY NOMINAL	TYP VENDOR	LOCATION	H.P.	DRIVE TYPE	COST
26	0013/3	430-W-08-M1	MOTOR	EG&G	TEFC					207ABB	200		N/C
27	0013/3	430-CA-02	CASTING, INSPECTION & MAT'L HANDLING	BID	EG&G TO PROVIDE MOTORIZED TRANSPORTATION					207ABB			\$21,000
28	0013/3	430-W-08	REAGENT DUST COLLECTOR	BID			38 SF		FLEXKLEEN	207ABB			\$15,000
29	0013/3	08A	DUST COLLECTOR FAN	BID						207ABB			\$2,000
30		430-P-20	POND WATER RECLAIM PUMP	CONTRACT	2' x 48" VERT. CENT. MODEL 2-SR3-S100	60	150 GPM	100 GPM	LEFCO	207C	15	F/S	\$8,000
31		430-P-20-M1	MOTOR	CONTRACT						207C			W/PUMP
32		430-S-18	DILUTION WATER TANK	BID	6' DIA x 6' HIGH					207C			\$1,200
33		430-P-18	DILUTION WATER PUMP	BID	3' x 1'-1/2' 8" HORZ. CENTER	60	150 GPM	100 GPM	DURIFON	207C	15	F/S	\$300
34		430-P-18-M1	MOTOR	BID						207C			W/PUMP
35		430-SC-02	SCALPING SCREEN	CONTRACT	4' W X 8' L @ 10 MESH VIB 5D SCREEN		400 GPM		LEFCO	207C	10	F/S	\$12,000
36		430-SC-02-M1	MOTOR	CONTRACT	TEFC					207C			W/SCREEN
37		430-S-16	AVERAGING TANK 1 SKID	HNUJ	6' DIA x 6' HIGH		2100 GAL		HALLIBURTON	207C			\$124,250
38		430-A-16	AVERAGING TANK 1 AGITATOR	HNUJ	4' - 5" DIA TURBINE IMPELLER				HALLIBURTON	207C			SYS COMP
39		430-P-28	RECYCLE PUMP 1	HNUJ	4' CENTRIFUGAL W/ AC MOTOR	45	420 GPM		HALLIBURTON	207C	100	V/S	\$3,500
40		430-W-12	HYDRAULIC SYSTEM 1	HNUJ					HALLIBURTON	207C			SYS COMP
41		430-W-12-M1	MOTOR	HNUJ					HALLIBURTON	207C			SYS COMP
42		430-S-17	AVERAGING TANKS 2&3 SKID	HNUJ					HALLIBURTON	207C			\$248,500
43		430-A-17	AVERAGING TANK 2&3 AGITATOR	HNUJ	4' - 5" DIA TURBINE IMPELLER				HALLIBURTON	207C			SYS COMP
44		430-P-23	RECYCLE PUMPS 2&3	HNUJ	4' CENTRIFUGAL W/ AC MOTOR	45	420 GPM		HALLIBURTON	207C	100	V/S	\$7,000
45		430-W-13	HYDRAULIC SYSTEM 2&3	HNUJ					HALLIBURTON	207C			SYS COMP
46		430-W-13-M1	MOTOR	HNUJ					HALLIBURTON	207C			SYS COMP
47		430-P-25	AVERAGING TANK BOOSTER PUMPS, (3)	BID					HALLIBURTON	207C			\$10,500
48		430-P-25-M1	MOTORS, (3)	BID					HALLIBURTON	207C			W/PUMPS
49		430-P-22	RECLAIM TRANSFER PUMP	BID					HALLIBURTON	207C			\$3,000
50		430-S-19	AVERAGING TANKS 4&5 SKID	HNUJ					HALLIBURTON	768 AREA			\$248,508

11/18

Attachment 13

CLIENT: E&G ROCKY FLATS  
 HNUIS JOB NO.: 3157  
 REVISION: 7

BROWN & ROOT, INC. - JOB NO. JR-1184  
 MASTER EQUIPMENT LIST  
 PONDLOGGIE BATCH PROCESS  
 POND 207C - ALTERNATIVE 2

DATA DATE: 02-Apr-82  
 PRINT DATE: 12-Apr-82

SEQ. NO.	DRG. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN	NOMINAL	TYP. VENDOR	LOCATION	H.P.	DRIVE TYPE	COST
51		430-A-19	AVERAGING TANK 485 AGITATOR	HNUIS	4" - 5" DIA TURBINE IMPELLER				HALLIBURTON	207C		V/S	SYS COMP \$7,000
52		430-P-24	RECYCLE PUMPS 485	HNUIS	4" CENTRIFUGAL W/ AC MOTOR	45	420 GPM		HALLIBURTON	207C		V/S	SYS COMP \$7,000
53		430-W-14	HYDRAULIC SYSTEM 485	HNUIS					HALLIBURTON	207C		V/S	SYS COMP \$248,500
54		430-W-14-M1	MOTOR	HNUIS					HALLIBURTON	207C	100	V/S	SYS COMP \$7,000
55		430-S-19	AVERAGING TANKS 687 SKID	HNUIS	4" - 5" DIA TURBINE IMPELLER				HALLIBURTON	207C		V/S	SYS COMP \$7,000
56		430-A-19	AVERAGING TANK 687 AGITATOR	HNUIS	4" CENTRIFUGAL W/ AC MOTOR				HALLIBURTON	207C		V/S	SYS COMP \$7,000
57		430-P-24	RECYCLE PUMPS 687	HNUIS		45	420 GPM		HALLIBURTON	207C		V/S	SYS COMP \$7,000
58		430-W-14	HYDRAULIC SYSTEM 687	HNUIS					HALLIBURTON	207C		V/S	SYS COMP \$243,165
59		430-W-14-M1	MOTOR	HNUIS					HALLIBURTON	207C	100	V/S	SYS COMP \$7,000
60		430-S-21	PCM MIXER UNIT	HNUIS					HALLIBURTON	207C		V/S	SYS COMP \$243,165
61		430-A-21	PCM AGITATOR	HNUIS					HALLIBURTON	207C		V/S	SYS COMP \$243,165
62			AIR COMPRESSORS W/ AC MOTORS	HNUIS	300 CFM, 40 PSI, (2) EACH				HALLIBURTON	207C		V/S	SYS COMP \$44,460
63			DUST COLLECTORS	HNUIS	BAG TYPE, (2) EACH				HALLIBURTON	207C		V/S	SYS COMP \$2,000
64			DENSOMETERS	HNUIS	2" R/A TYPE, (4) EACH				HALLIBURTON	207C		V/S	SYS COMP \$109,200
65			FLOWMETERS	HNUIS	3" MAGNETIC, (4) EACH				HALLIBURTON	207C		V/S	SYS COMP \$20,000
66			COMPU-PAC SYSTEM	HNUIS	DATA LOGGING SYSTEM, (2) EACH				HALLIBURTON	207C		V/S	SYS COMP \$20,000
67			PNEUMATIC SCALE TANKS	HNUIS					HALLIBURTON	207C		V/S	SYS COMP \$20,000
68		430-F1-03	HEPA H E FILTRATION SYSTEM	BID					HALLIBURTON	207C		V/S	SYS COMP \$20,000
69		03A	FAN	BID					HALLIBURTON	207C		V/S	SYS COMP \$20,000
70			FIELD STORAGE BINS - (6) EACH	HNUIS	(6) HORIZONTAL STORAGE BINS, 1410 CF EACH		1410 CF		HALLIBURTON	207C	112.6	V/S	\$1,251,130

NOTES: 1) FIXED SPEED MOTORS ARE FIXED SPEED 480V, 3 PHASE, 60 HZ  
 2) BID - TO BE PROCURED BY COMPETITIVE BID  
 3) SOLE - SINGLE SOURCE EQUIPMENT FROM SELECTED VENDOR  
 4) LEASE - ANTICIPATED LEASED EQUIPMENT  
 5) MOTORS ARE FIXED SPEED  
 6) FREQUENCY INVERTERS ARE ASSUMED  
 7) V/S = VARIABLE SPEED  
 8) THIS EQUIPMENT BASED ON REV. 8 PFD'S ISSUED 04/02/82  
 9) THE COSTS WHERE GIVEN ARE PRELIMINARY TELEPHONE BUDGET QUOTES  
 10) EG&G - TO BE PROVIDED BY EG&G  
 11) NC - NO CHARGE

11/16

**PRELIMINARY**

**MASTER EQUIPMENT LIST  
EG & G ROCKY FLATS  
PONDCRETE REPROCESSING  
BROWN AND ROOT, INC., JOB NO. JR-1198**

JAN 1992  
FILE: POND CRT1.WK1  
REVISION: 1

EQ. NO.	DRG. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN NOMINAL	TYP. VENDOR	PAD NO.	H.P.	DRIVE TYPE	COST
1		440-20-CR-01	PRIMARY CRUSHER	SOLE	AUGER CRUSHER - SHREDDER		10 TPH	HOMAR	904	100.0		\$4,000,000
2		440-20-CR-01-M1		SOLE	TEFC				904	100.0		
3		440-20-CR-01-M2		SOLE	TEFC				904	100.0		
4		440-20-CR-01-M3		SOLE	TEFC				904	200.0		
7		440-20-CR-01-M4		SOLE	TEFC				904	200.0		
8		440-20-CR-01-M5		SOLE	TEFC				904	2.0		
9		440-20-CR-01-M6		SOLE	TEFC				904	2.0		
10		440-20-CR-01-M7		SOLE	TEFC				904	3.0		
11		440-20-CR-01-M8		SOLE	TEFC				904	3.0		\$810,000
12		440-20-SM-01	SAG MILL	BID	8' DIA X 6' LONG		10 TPH	ALLIS	904	75.0		\$7,500
13		440-20-BM-01-M1		BID	TEFC				904	1.0		\$950
14		440-20-MA-01	SELF CLEANING MAGNET	BID					904	1.0		\$6,070
15		440-20-MA-01-M1		BID					904	1.0		\$950
16		440-20-SU-01	MILL DISCHARGE SUMP	BID	4' DIA X 4' DEEP		25	GALIGHER	904	7.5	VIS	\$38,500
17		440-20-P-01	MILL DISCHARGE PUMP	BID	2" X 48" VERT. CENT. MODEL 2-8R3-S100		50 GPM		904	7.5	VIS	\$29,000
18		440-20-P-01-M1		BID	TEFC				904	7.5	VIS	\$950
19		440-20-SC-02	CLASSIFICATION SCREEN	BID	4' W X 8' L @ 10 MESH VIB. S D. SCREEN		50 GPM	DERRICK	904	3.0	F/S	\$29,000
20		440-20-SC-02-M1		BID	TEFC				904	3.0	F/S	\$950
21		440-20-CR-02	PULVERIZER	BID	36" DIA. DISC PULVERIZER		2 TPH	SPROUT BAUE	904	150.0	F/S	\$4,120
22		440-20-CR-02-M1		BID	TEFC				904	150.0	F/S	\$950
23		440-20-CR-02-M1	PULVERIZER SUMP	BID	4' DIA X 4' DEEP		30 GPM	GALIGHER	904	5.0	F/S	\$28,000
24		440-20-CR-02-M1	PULVERIZER DISCHARGE PUMP	BID	1.5' X 48" VERT. CENT. MODEL 1.5 BRO-S100				904	5.0	F/S	\$4,750
25		440-20-P-06	ELUTRIATOR	BID	2' W X 6' L @ 10 MESH S D. VIB. SCREEN				904	2.0	F/S	\$6,070
26		440-20-P-06-M1		BID	TEFC				904	2.0	F/S	\$4,750
27		440-20-SC-02	SCALPING SCREEN	BID	8' DIA X 6' HIGH		1000 GAL	CARRICO	904	7.5	F/S	\$20,000
28		440-20-P-24	SCREEN UNDERFLOW SUMP	BID	2' X 48" L VERT. CENT. MODEL 2-8R3-S100		50 GPM	DERRICK	904	7.5	F/S	\$4,750
29		440-20-P-24-M1	HOLDING TANK TANK FEED PUMP	BID	TEFC				904	7.5	F/S	\$20,000
30		440-20-P-24-M1		BID	TEFC				904	7.5	F/S	\$4,750
31		440-20-A-02	HOLDING TANK	BID	70015 A-310 IMPELLER		4200 GAL	LIGHTNIN	904	15.0	F/S	\$20,000
32		440-20-A-02-M1		BID	TEFC				904	15.0	F/S	\$4,750
33		440-20-P-07	CEMENT MIXER FEED PUMP - 2'	BID	2-1/2' X 2' HORIZ. CENT. MODEL 2VRA-1000		50	GALIGHER	904	25.0	V/S	\$6,170
34		440-20-P-07-M1		BID	TEFC				904	25.0	V/S	\$4,750
35		440-20-A-03	HOLDING TANK	BID	8' DIA X 10' HIGH		4200 GAL	LIGHTNIN	904	15.0	F/S	\$20,000
36		440-20-P-08	HOLDING TANK AGITATOR	BID	70015 A-310 IMPELLER				904	15.0	F/S	\$4,750
37		440-20-A-03-M1		BID	TEFC				904	15.0	F/S	\$20,000
38		440-20-P-08	CEMENT MIXER FEED PUMP - 2'	BID	2-1/2' X 2' HORIZ. CENT. MODEL 2VRA-1000		50	GALIGHER	904	25.0	V/S	\$6,170
39		440-20-P-08-M1		BID	TEFC				904	25.0	V/S	\$4,750
40	3	440-40-MX-02	CEMENT MIXER #1A	BID	5' DIA X 3-1/2' LONG HIGH SPEED BLENDER		7.0 TPH	TELEDYNE	904	7.5	F/S	\$48,000
41		440-40-MX-02-M1		BID	TEFC				904	7.5	F/S	\$48,000
42	3	440-40-MX-01	CEMENT MIXER #1B	BID	25 FT3 CONICAL MIXER, MODEL RA-25		7.0 TPH	JAYBO	904	7.5	F/S	\$48,000
43		440-40-MX-01-M1		BID	TEFC				904	7.5	F/S	\$48,000
44		440-40-MX-01-M2		BID	TEFC				904	7.5	F/S	\$48,000

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REV. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN NOMINAL	TYP. VENDOR	PAD NO.	H.P. DRIVE	COST
45	440-40-MX-04	CEMENT MIXER 12A	BID	5" DIA. X 3-1/2' LONG HIGH SPEED BLENDER		7.0 TPH	TELEDYNE	904	V/S	\$96,900
46	440-40-MX-04-M1	CEMENT MIXER 12B	BID	TEFC		7.0 TPH	JAYBO	904	F/S	\$45,000
47	440-40-MX-03	CEMENT MIXER 12B	BID	25 FT3 CONICAL MIXER, MODEL RA-25						
48	440-40-MX-03-M1		BID	TEFC						
49	440-40-MX-03-M2		BID	TEFC						
50	440-40-Z-01	CEMENT FEED SYSTEM (TRAIN #1)	BID	CEMENT FEED AND DELIVERY SYSTEM						
51	01A	BIN VENT DUST COLLECTOR	BID	400 CFM			FLECKLEN	904	1.5	\$3,800
52	01B	DAY TANK	BID	1800 CUBIC FEET			HALLIBURTON	904	1.5	\$20,500
53	01C	ROTARY VALVE	BID	10" DIA. X 8" L @ 21 RPM			SPROUT BAUE	904	1.0	\$3,700
54	01D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	904	2.0	\$4,500
55	01E	SCREW CONVEYOR	BID	12" DIA @ 400 CFH			CONTINENTAL	904	5.0	\$5,000
56	01F	SURGE HOPPER	BID	200 CUBIC FEET			HALLIBURTON	904	0.5	\$3,000
57	01G	ROTARY FEEDER	BID	8" DIA X 6" L @ 19 RPM			SPROUT BAUE	904	0.5	\$3,500
58	01H	CEMENT WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	904	0.5	\$28,000
59	440-40-Z-02	HYDRATED LIME FEED SYSTEM (TRAIN #1)	BID	LIME FEED AND DELIVERY SYSTEM						
60	02A	BIN VENT DUST COLLECTOR	BID	400 CFM			FLECKLEN	904	1.5	\$3,800
61	02B	DAY TANK	BID	800 CUBIC FEET			HALLIBURTON	904	1.5	\$13,200
62	02C	ROTARY VALVE	BID	8" DIA X 6" L @ 10.8 RPM			SPROUT BAUE	904	0.5	\$3,500
63	02D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	904	2.0	\$4,500
64	02E	SCREW CONVEYOR	BID	6" DIA X 7' @ 100 CFH			CONTINENTAL	904	2.0	\$5,000
65	02F	SURGE HOPPER	BID	50 CUBIC FEET			HALLIBURTON	904	0.5	\$3,000
66	02G	ROTARY FEEDER	BID	8" DIA X 6" L @ 4.4 RPM			SPROUT BAUE	904	0.5	\$3,500
67	02H	HYDRATED LIME WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	904	0.5	\$28,000
68	440-40-Z-03	FE#04 FEED SYSTEM (TRAIN #1)	BID	F#04 FEED AND DELIVERY SYSTEM						
69	03A	BAG BREAKER/STORAGE HOPPER	BID	150 CUBIC FEET RUBBER LINED C.S. TANK						
70	03B	ROTARY VALVE	BID	8" DIA X 6" WIDE @ 7 RPM			SPROUT BAUE	904	0.5	\$8,000
71	03C	F#04 WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 1.25 TPH			MERRICK	904	0.5	\$22,000
72	440-40-Z-04	FLY ASH FEED SYSTEM (TRAIN #1)	BID	FLY ASH FEED AND DELIVERY SYSTEM						
73	04A	BIN VENT DUST COLLECTOR	BID	400 CFM			FLECKLEN	904	1.5	\$3,800
74	04B	DAY TANK	BID	1800 CUBIC FEET			HALLIBURTON	904	1.5	\$20,500
75	04C	ROTARY VALVE	BID	14" DIA X 10" L @ 26 RPM			SPROUT BAUE	904	1.0	\$4,200
76	04D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	904	2.0	\$4,500
77	04E	SCREW CONVEYOR	BID	12" DIA @ 780 CFH			CONTINENTAL	904	6.0	\$5,000
78	04F	SURGE HOPPER	BID	200 CUBIC FEET			HALLIBURTON	904	0.0	\$4,000
79	04G	ROTARY FEEDER	BID	10" DIA. X 8" L @ 25 RPM			SPROUT BAUE	904	1.0	\$3,700
80	04H	FLY ASH WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	904	0.5	\$24,000
81	440-40-Z-05	CEMENT FEED SYSTEM (TRAIN #2)	BID	CEMENT FEED AND DELIVERY SYSTEM						
82	05A	BIN VENT DUST COLLECTOR	BID	400 CFM			FLECKLEN	904	1.5	\$3,800
83	05B	DAY TANK	BID	1800 CUBIC FEET			HALLIBURTON	904	1.5	\$20,500
84	05C	ROTARY VALVE	BID	10" DIA. X 8" L @ 21 RPM			SPROUT BAUE	904	1.0	\$3,700
85	05D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	904	2.0	\$4,500
86	05E	SCREW CONVEYOR	BID	12" DIA @ 400 CFH			CONTINENTAL	904	5.0	\$5,000
87	05F	SURGE HOPPER	BID	200 CUBIC FEET			HALLIBURTON	904	0.0	\$4,000
88	05G	ROTARY FEEDER	BID	8" DIA X 6" L @ 19 RPM			SPROUT BAUE	904	0.5	\$3,500
89	05H	CEMENT WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	904	0.5	\$28,000
90	440-40-Z-06	HYDRATED LIME FEED SYSTEM (TRAIN #2)	BID	LIME FEED AND DELIVERY SYSTEM						
91	06A	BIN VENT DUST COLLECTOR	BID	400 CFM			FLECKLEN	904	1.5	\$3,800
92	06B	DAY TANK	BID	800 CUBIC FEET			HALLIBURTON	904	1.5	\$13,200
93	06C	ROTARY VALVE	BID	8" DIA X 6" L @ 10.8 RPM			SPROUT BAUE	904	0.5	\$3,500
94	06D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	904	2.0	\$4,500
95	06E	SCREW CONVEYOR	BID	6" DIA X 7' @ 100 CFH			CONTINENTAL	904	2.0	\$5,000
96	06F	SURGE HOPPER	BID	50 CUBIC FEET			HALLIBURTON	904	0.5	\$3,000
97	06G	ROTARY FEEDER	BID	8" DIA X 6" L @ 4.4 RPM			SPROUT BAUE	904	0.5	\$3,500
98	06H	HYDRATED LIME WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	904	0.5	\$28,000

02/08/2013

SFC. NO.	REV. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY		TYP. VENDOR	PAD NO.	H.P.	DRIVE T	COST
							DESIGN	NOMINAL					
99		440-40-2-07	FESQ4 FEED SYSTEM (TRAIN #2)	BID	FESQ4 FEED AND DELIVERY SYSTEM					904			\$8,000
100	4	00A	BAG BREMER/STORAGE HOPPER	BID	180 CUBIC FEET RUBBER LINED C.S. TANK				SPROUT SAUE	904	0.5		\$8,000
101	4	00B	ROTARY VALVE	BID	8" DIA X 8" WIDE @ 7 RPM				MERRICK	904	0.5	V/B	\$22,000
102	4	00C	FASQ4 WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 1.25 TPH								
103	4	440-40-2-08	FLY ASH FEED SYSTEM (TRAIN #2)	BID	FLY ASH FEED AND DELIVERY SYSTEM								
104	4	04A	BIN VENT DUST COLLECTOR	BID	400 CFM								\$3,800
105	4	04B	DAY TANK	BID	1800 CUBIC FEET				FLECKLEEN	904	1.5		\$20,500
106	4	04C	ROTARY VALVE	BID	14" DIA X 10' L @ 26 RPM				HALLIBURTON	904	1.0		\$4,200
107	4	04D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PS				SPROUT SAUE	904	2.0		\$4,500
108	4	04E	SCREW CONVEYOR	BID	12" DIA @ 700 CFM				ROOTS	904	0.9		\$5,000
109	4	04F	SURGE HOPPER	BID	200 CUBIC FEET				CONTINENTAL	904	0.9		\$8,000
110	4	04G	ROTARY FEEDER	BID	10" DIA. X 8' L @ 25 RPM				HALLIBURTON	904	1.0		\$3,700
111	4	04H	FLY ASH WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH				SPROUT SAUE	904	0.5	V/B	\$28,000
112	4	440-30-P-25	FLY ASH FEED PUMP #1A	BID	MODEL 2F036 #2000 PROGRESSIVE CAVITY PUMP	110	100 GPM		MERRICK	904	0.5	V/B	\$20,200
113		440-30-P-25-M1	FLY ASH FEED PUMP #1B	BID	TEFC				MOYNO	904	25.0		\$20,200
114		440-30-P-26	FLY ASH FEED PUMP #1C	BID	MODEL 2F036 #2000 PROGRESSIVE CAVITY PUMP	110	100 GPM		MOYNO	904	25.0		\$400,000
115		440-30-P-26-M1	FLY ASH FEED PUMP #1D	BID	TEFC				MOYNO	904	25.0		\$400,000
116		440-30-F-01	SLURRY FILTER #1	SOLE	PF 18 @ 203 FT2 PRESSURE FILTER		5.3 TPH		LAROX	904	10.0		
117		440-30-F-01-M1	CLAMP DRIVE	SOLE	TEFC				LAROX	904	1.5		
118		440-30-F-01-M2	CLOTH TENSIONER	SOLE	TEFC				LAROX	904	0.9		
119		440-30-F-01-M3	FILTER DRIVE	SOLE	TEFC				LAROX	904	20.0		
120		440-30-F-01-M4	WATER PUMP DRIVE	SOLE	PF 18 @ 203 FT2 PRESSURE FILTER		5.3 TPH		LAROX	904	10.0		\$400,000
121		440-30-F-02	SLURRY FILTER #2	SOLE	TEFC				LAROX	904	1.5		
122		440-30-F-02-M1	CLAMP DRIVE	SOLE	TEFC				LAROX	904	0.9		
123		440-30-F-02-M2	CLOTH TENSIONER	SOLE	TEFC				LAROX	904	20.0		\$10,000
124		440-30-F-02-M3	FILTER DRIVE	SOLE	TEFC				LAROX	904	1.5		\$10,000
125		440-30-F-02-M4	WATER PUMP DRIVE	SOLE	TEFC				LAROX	904	10.0		\$16,000
126		440-40-C-02	FILTER CAKE DISCHARGE CONVEYOR 1A	BID	18" WIDE X 12.5' L ENCLOSED BELT CONVEYOR		5 TPH		CONTINENTAL	904	1.5	F/B	\$10,000
127		440-40-C-02-M1	FILTER CAKE DISCHARGE CONVEYOR 1B	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$10,000
128		440-40-C-03	FILTER CAKE DISCHARGE CONVEYOR 1C	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$16,000
129		440-40-C-03-M1	FILTER CAKE DISCHARGE CONVEYOR 1D	BID	TEFC				CONTINENTAL	904	10.0		\$10,000
130	4	440-40-C-04	FILTER CAKE DISCHARGE CONVEYOR 2A	BID	18" WIDE X 12.5' L ENCLOSED BELT CONVEYOR		5 TPH		CONTINENTAL	904	1.5	F/B	\$10,000
131	4	440-40-C-04-M1	FILTER CAKE DISCHARGE CONVEYOR 2B	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$10,000
132		440-40-C-04	FILTER CAKE DISCHARGE CONVEYOR 2C	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$10,000
133		440-40-C-04-M1	FILTER CAKE DISCHARGE CONVEYOR 2D	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$10,000
134		440-40-C-05	FILTER CAKE DISCHARGE CONVEYOR 2E	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$10,000
135		440-40-C-05-M1	FILTER CAKE DISCHARGE CONVEYOR 2F	BID	TEFC				CONTINENTAL	904	1.5	F/B	\$16,000
136		440-40-C-07	PROCESS WATER TANK	BID	8" DIA X 10' HIGH		4200 GAL			904	10.0		\$4,750
137		440-30-S-03	PROCESS WATER PUMP	BID	3" X1-1/2" - 8" HORIZ. CENT.		50 150 GPM			904	15.0	F/B	\$3,150
138		440-30-P-09	PROCESS WATER PUMP	BID	TEFC				DURIRON	904	15.0	F/B	\$3,150
139		430-40-P-08-M1	PROCESS WATER PUMP	BID	TEFC				DURIRON	904	15.0	F/B	\$3,150
140		440-30-P-10	PROCESS WATER PUMP	BID	3" X1-1/2" - 8" HORIZ. CENT.		50 150 GPM			904	15.0	F/B	\$3,200
141		440-30-P-10-M1	PROCESS WATER PUMP	BID	TEFC				MOYNO	904	7.5	F/B	\$15,900
142		440-30-P-10-M1	DIRTY WATER SEPARATOR	BID	8" DIA X 6" HIGH		1600 GAL			904	15.0	F/B	\$950
143		440-40-B-01	SEPARATOR PUMP	BID	20030831-CQG-DAA #2000 PROGRESSIVE CAVITY		50 50 GPM			904	7.5	F/B	\$5,950
144		440-40-P-05	CEMENTING FLUSH WATER BUMP	BID	4" DIA X 4' HIGH		300 GAL			904	15.0	F/B	\$5,950
145	3	440-40-P-05-M1	CEMENTING FLUSH WATER PUMP	BID	TEFC				GALIGHER	904	15.0	F/B	\$3,550
146		440-40-BU-01	CEMENTING FLUSH WATER PUMP	BID	TEFC				GALIGHER	904	15.0	F/B	\$3,550
147	3	440-40-P-06	AREA SUMP PUMP	BID	2" X48" L VERT. CENT. MODEL 2-SRS-5100		40 125 GPM			904	15.0	F/B	\$180,000
148		440-40-P-06-M1	AREA SUMP PUMP	BID	TEFC				GALIGHER	904	15.0	F/B	\$37,000
149		440-50-P-01	904 AREA ELECTRIC GENERATOR	BID	1500 KW DIESEL ELECTRIC GENERATOR		40 125 GPM			904	15.0	F/B	\$180,000
150		440-50-P-01-M1	904 AREA AIR COMPRESSOR	BID	100 PSI @ 160 ACFM AIR COMPRESSOR		160 ACFM		BULLAIR	904	15.0	F/B	\$37,000
151		440-50-B-01		BID									
152		440-50-X-01		BID									

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SEQ. NO.	REV. NO.	EQUIP. NO.	EQUIPMENT NAME	PROQUOTE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY		TYP. VENDOR	PAD NO.	H.P. DRIVE	COST
							DESIGN	NOMINAL				
153		440-50-K-01-M1		BID	TEFC				MI-VAC	904	20.0	940,000
154	3	440-50-W-01	PORTABLE SLUDGE VACUUM	BID	MODEL # 300 W11.5 YDS HOPPER AND JACK		2 TPH			904	20.0	
155	3	440-50-W-01-M1		BID	TEFC					904	1254.5	
156												87,151,500
157												

NOTES: F/S = FIXED SPEED  
 V/S = VARIABLE SPEED  
 MOTORS ARE FIXED SPEED: 480V, 3 PHASE, 60 HZ  
 FREQUENCY INVERTERS ARE ASSUMED.

THIS EQUIPMENT LIST IS PRELIMINARY WITH LAST REVISION ON 23 JAN 1992.  
 THE COSTS ARE PRELIMINARY TELEPHONE BUDGET QUOTES EXCEPT FOR THE PRIMARY CRUSHER.

FOR REVISION 1, REFER TO PLAN A, STAGE 1, REV. 4

A) Eliminated the following equipment items:

- 430-10-DR-10 SUCTION DREDGE
- 430-10-G-01 DIESEL GENERATOR SET
- 430-20-BC-02 CLASSIFICATION SCREEN
- 430-20-W-00.04 DUMPSTER BOXES
- 430-20-SU-02 CYCLONE FEED PUMP
- 430-20-A-02 CYCLONE FEED PUMP AGITATOR
- 430-20-P-00.04 CYCLONE FEED PUMPS
- 430-20-W-01.02 CYCLONE CLUSTER MANIFOLDS
- 430-20-CY-01-20 DESLIMING CYCLONES
- 430-20-PM-01 PIN MILL
- 430-20-SU-01 MILL DISCHARGE PUMP
- 430-20-A-01 MILL DISCHARGE BUMP AGITATOR
- 430-20-P-01.02 MILL DISCHARGE PUMPS
- 430-30-TH-01.02 THICKENER CLARIFIERS
- 430-30-P-01.02 UNDERFLOW PUMPS
- 430-30-P-11.12 UNDERFLOW PUMPS
- 430-30-SU-02 DECANT TRANSFER PUMP
- 430-30-P-05.06 DECANT TRANSFER PUMPS
- 430-30-SU-01 SLURRY TRANSFER PUMP
- 430-30-A-01 SLURRY TRANSFER BUMP AGITATOR
- 430-30-P-00.04 SLURRY TRANSFER PUMPS
- 430-30-G-01 DIESEL GENERATOR SET
- 430-30-Z-02 FLOCCULANT SYSTEM

B) Added the following equipment items:

- 440-40-P-07.08 CEMENT MIDER FEED PUMPS
- 440-40-Z-01 CEMENT FEED SYSTEM (TRAIN #1)
- 440-40-Z-02 LINE FEED SYSTEM (TRAIN #1)
- 440-40-Z-03 F#504 FEED SYSTEM (TRAIN #1)
- 440-40-Z-04 FLY ASH FEED SYSTEM (TRAIN #1)
- 440-40-Z-05 CEMENT FEED SYSTEM (TRAIN #2)
- 440-40-Z-06 LINE FEED SYSTEM (TRAIN #2)
- 440-40-Z-07 F#504 FEED SYSTEM (TRAIN #2)
- 440-40-Z-08 FLY ASH FEED SYSTEM (TRAIN #2)
- 440-30-P-25.26 FILTER FEED PUMPS
- 440-40-C-02-05 FILTER CAME DISCHARGE CONVEYORS
- 440-40-C-06.07 HALF CRATE FEED CONVEYORS

23 JAN 1992

FILE: SALT CRT0.WK1

REVISION: 0

MASTER EQUIPMENT LIST  
EG & G ROCKY FLATS  
SALTCRETE REPROCESSING  
BROWN AND ROOT, INC., JOB NO. JR-1198

Attachment 1  
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SEQ. NO.	DRG. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN NOMINAL	TYP. VENDOR	PAD NO.	H.P.	DRIVE TYPE	COST
1		440-20-CR-01	PRIMARY CRUSHER	SOLE	ANGER CRUSHER - SHREDDER		10 TPH	KOMAR	904	100.0		\$4,000,000
2		440-20-CR-01-M1		SOLE	TEFC				904	100.0		
3		440-20-CR-01-M2		SOLE	TEFC				904	100.0		
4		440-20-CR-01-M3		SOLE	TEFC				904	200.0		
5		440-20-CR-01-M4		SOLE	TEFC				904	200.0		
6		440-20-CR-01-M5		SOLE	TEFC				904	5.0		
7		440-20-CR-01-M6		SOLE	TEFC				904	5.0		
8		440-20-CR-01-M7		SOLE	TEFC				904	5.0		
9		440-20-CR-01-M8		SOLE	TEFC				904	5.0		
10		440-20-SM-01	SAG MILL	BID	8' DIA X 6' LONG		10 TPH	ALLIS	904	75.0		\$910,000
11		440-20-SM-01-M1		BID	TEFC				904	75.0		\$7,500
12		440-20-MA-01	SELF CLEANING MAGNET	BID					904	1.0		\$950
13		440-20-MA-01-M1		BID					904	1.0		\$8,070
14		440-20-SU-01	MILL DISCHARGE SUMP	BID	4' DIA X 4' DEEP	25	50 GPM	GALIGHER	904	7.5	V18	\$28,500
15		440-20-P-01	MILL DISCHARGE PUMP	BID	2' X 48" VERT. CENT. MODEL 2-SR3-S100				904	7.5	F18	\$38,000
16		440-20-P-01-M1		BID	TEFC				904	7.5	F18	\$38,000
17		440-20-SC-02	CLASSIFICATION SCREEN	BID	4' W X 8' L @ 10 MESH VIB. S.D. SCREEN				904	3.0		\$38,000
18		440-20-SC-02-M1		BID	TEFC				904	3.0		\$38,000
19		440-20-CR-02	PULVERIZER	BID	36" DIA. DISC PULVERIZER		2 TPH	SPROUT BAUE	904	150.0	F18	\$950
20		440-20-CR-02-M1		BID	TEFC				904	150.0	F18	\$4,120
21		440-20-SU-04	PULVERIZER SUMP	BID	4' DIA X 4' DEEP		30 GPM	GALIGHER	904	8.0		\$28,000
22		440-20-P-06	PULVERIZER DISCHARGE PUMP	BID	1.5' X 48" VERT. CENT. MODEL 1.5 SR0-S100				904	2.0	F18	\$8,070
23		440-20-P-06-M1		BID	TEFC				904	2.0	F18	\$20,000
24		440-20-SC-01	ELUTRIATOR	BID	2' W X 6' L @ 10 MESH VIB. S.D. SCREEN				904	2.0	F18	\$8,070
25		440-20-SC-02	SCALPING SCREEN	BID	TEFC				904	2.0	F18	\$4,750
26		440-20-SC-02-M1		BID	TEFC				904	2.0	F18	\$20,000
27		440-20-SU-01	SCREEN UNDERFLOW SUMP	BID	8' DIA X 6' HIGH		1000 GAL		904	7.5		\$9,170
28		440-20-P-24	HOLDING TANK TANK FEED PUMP	BID	2' X 48" L VERT. CENT. MODEL 2-SR3-S100	30	50 GPM	GALIGHER	904	15.0	F18	\$4,750
29		440-20-P-24-M1		BID	TEFC		4200 GAL		904	15.0	F18	\$20,000
30		440-20-P-01	HOLDING TANK	BID	9' DIA X 10' HIGH				904	11.0	V18	\$9,170
31		440-20-A-02-M1	HOLDING TANK AGITATOR	BID	TDQ15 A-310 IMPELLER				904	11.0	V18	\$4,750
32		440-20-A-02	CEMENT MIXER FEED PUMP - 2"	BID	2-1/2" X 2" HORIZ. CENT. MODEL 2V9A-1000	50	100 GPM	GALIGHER	904	25.0	V18	\$98,900
33		440-20-P-07-M1		BID	TEFC				904	11.0	V18	\$45,000
34		440-20-P-07	HOLDING TANK	BID	9' DIA X 10' HIGH		4200 GAL		904	11.0	F18	\$4,750
35		440-20-P-02	HOLDING TANK AGITATOR	BID	TDQ15 A-310 IMPELLER				904	11.0	F18	\$20,000
36		440-20-A-03-M1	CEMENT MIXER FEED PUMP - 2"	BID	2-1/2" X 2" HORIZ. CENT. MODEL 2V9A-1000	50	100 GPM	GALIGHER	904	25.0	V18	\$98,900
37		440-20-A-03		BID	TEFC				904	11.0	V18	\$45,000
38		440-20-P-08	CEMENT MIXER FEED PUMP - 2"	BID	2-1/2" X 2" HORIZ. CENT. MODEL 2V9A-1000	50	100 GPM	GALIGHER	904	25.0	V18	\$98,900
39		440-20-P-08-M1		BID	TEFC				904	25.0	V18	\$45,000
40		440-20-MX-02	CEMENT MIXER #1A	BID	5' DIA. X 3-1/2' LONG HIGH SPEED BLENDER		7.0 TPH	TELEDYNE	904	7.5	F18	\$45,000
41		440-20-MX-02-M1		BID	TEFC				904	7.5	F18	\$45,000
42		440-20-MX-01	CEMENT MIXER #1B	BID	25 FTS CONICAL MIXER, MODEL RA-25		7.0 TPH	JAYGO	904	7.5	F18	\$45,000
43		440-20-MX-01-M1		BID	TEFC				904	7.5	F18	\$45,000
44		440-20-MX-01-M2		BID	TEFC				904	7.5	F18	\$45,000

REV. NO.	SEQ. NO.	REV. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN NOMINAL	TYP. VENDOR	PAD NO.	H.P.	DRIVE T	COST
45		3	440-40-MK-04	CEMENT MIXER #2A	BID	5' DIA X 3-1/2' LONG HIGH SPEED BLENDER		7.0 TPH	TELEDYNE	004		V/B	\$96,800
46		3	440-40-MK-04-M1	CEMENT MIXER #2B	BID	25 FTS CONICAL MIXER, MODEL RA-25		7.0 TPH	JAYGO	004	25.0	F/S	\$45,000
47			440-40-MK-03		BID	TEFC				004	7.5		
48			440-40-MK-03-M1		BID	TEFC				004	1.5		
49			440-40-MK-03-M2		BID	CEMENT FEED AND DELIVERY SYSTEM				004	1.5		
50			440-40-Z-01	CEMENT FEED SYSTEM (TRAIN #1)	BID	CEMENT FEED AND DELIVERY SYSTEM				004	1.5		\$3,800
51		4	01A	BIN VENT DUST COLLECTOR	BID	1800 CUBIC FEET			FLECKLEEN	004			\$20,500
52		4	01B	DAY TANK	BID	10' DIA X 8' L @ 21 RPM			HALLIBURTON	004	1.0		\$3,700
53		4	01C	ROTARY VALVE	BID	5900 RPM @ 95 CFM @ 2 PSI			SPROUT BAUE	004	2.0		\$4,500
54		4	01D	BLOWER	BID	12' DIA @ 400 CFH			ROOTS	004	3.0		\$5,000
55		4	01E	SCREW CONVEYOR	BID	200 CUBIC FEET			CONTINENTAL	004			\$6,000
56		4	01F	SURGE HOPPER	BID	8' DIA X 8' L @ 19 RPM			HALLIBURTON	004	0.5		\$3,500
57		4	01G	ROTARY FEEDER	BID	24" WIDE X 7' L @ 9 TPH			SPROUT BAUE	004	0.5	V/S	\$20,000
58		4	01H	CEMENT WEIGH BELT FEEDER	BID	LINE FEED AND DELIVERY SYSTEM			MERRICK	004			\$3,800
59		4	440-40-Z-02	HYDRATED LIME FEED SYSTEM (TRAIN #1)	BID	LINE FEED AND DELIVERY SYSTEM			FLECKLEEN	004	1.5		\$13,500
60		4	02A	BIN VENT DUST COLLECTOR	BID	400 CFM			HALLIBURTON	004	0.5		\$3,500
61		4	02B	DAY TANK	BID	8' DIA X 8' L @ 10.9 RPM			SPROUT BAUE	004	2.0		\$4,500
62		4	02C	ROTARY VALVE	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	004	2.0		\$5,000
63		4	02D	BLOWER	BID	8' DIA X 7' @ 100 CFH			CONTINENTAL	004			\$3,000
64		4	02E	SCREW CONVEYOR	BID	50 CUBIC FEET			HALLIBURTON	004	0.5		\$3,500
65		4	02F	SURGE HOPPER	BID	8' DIA X 8' L @ 4.4 RPM			SPROUT BAUE	004	0.5	V/S	\$20,000
66		4	02G	ROTARY FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	004	0.5		\$8,000
67		4	02H	CEMENT WEIGH BELT FEEDER	BID	HYDRATED LIME FEED AND DELIVERY SYSTEM			SPROUT BAUE	004	0.5	V/S	\$8,000
68		4	440-40-Z-03	FES04 FEED SYSTEM (TRAIN #1)	BID	190 CUBIC FEET RUBBER LINED C.S. TANK			MERRICK	004	0.5		\$2,000
69		4	03A	BAG BREAKER/STORAGE HOPPER	BID	8' DIA X 8' WIDE @ 7 RPM			SPROUT BAUE	004	0.5	V/S	\$8,000
70		4	03B	ROTARY VALVE	BID	24" WIDE X 7' L @ 1.25 TPH			MERRICK	004	0.5		\$22,000
71		4	03C	F8004 WEIGH BELT FEEDER	BID	FLY ASH FEED AND DELIVERY SYSTEM			SPROUT BAUE	004	0.5	V/S	\$3,800
72		4	440-40-Z-04	FLY ASH FEED SYSTEM (TRAIN #1)	BID	FLY ASH FEED AND DELIVERY SYSTEM			MERRICK	004	0.5		\$20,500
73		4	04A	BIN VENT DUST COLLECTOR	BID	400 CFM			FLECKLEEN	004	1.5		\$4,200
74		4	04B	DAY TANK	BID	1800 CUBIC FEET			HALLIBURTON	004	1.0		\$4,500
75		4	04C	ROTARY VALVE	BID	14' DIA X 10' L @ 20 RPM			SPROUT BAUE	004	2.0		\$5,000
76		4	04D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	004	3.0		\$8,000
77		4	04E	SCREW CONVEYOR	BID	12' DIA @ 780 CFH			CONTINENTAL	004			\$3,700
78		4	04F	SURGE HOPPER	BID	200 CUBIC FEET			HALLIBURTON	004	0.0		\$5,000
79		4	04G	ROTARY FEEDER	BID	10' DIA X 8' L @ 25 RPM			SPROUT BAUE	004	1.0		\$8,000
80		4	04H	FLY ASH WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	004	0.5	V/S	\$20,000
81		4	440-40-Z-05	CEMENT FEED SYSTEM (TRAIN #2)	BID	CEMENT FEED AND DELIVERY SYSTEM			FLECKLEEN	004	1.5		\$3,800
82		4	01A	BIN VENT DUST COLLECTOR	BID	400 CFM			HALLIBURTON	004	1.0		\$20,500
83		4	01B	DAY TANK	BID	1800 CUBIC FEET			SPROUT BAUE	004	2.0		\$4,500
84		4	01C	ROTARY VALVE	BID	10' DIA X 8' L @ 21 RPM			ROOTS	004	2.0		\$5,000
85		4	01D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			CONTINENTAL	004	3.0		\$9,000
86		4	01E	SCREW CONVEYOR	BID	12' DIA @ 400 CFH			HALLIBURTON	004	0.5		\$3,800
87		4	01F	SURGE HOPPER	BID	200 CUBIC FEET			MERRICK	004	0.5	V/S	\$20,000
88		4	01G	ROTARY FEEDER	BID	8' DIA X 8' L @ 19 RPM			FLECKLEEN	004	1.5		\$3,800
89		4	01H	CEMENT WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			HALLIBURTON	004	0.5		\$13,500
90		4	440-40-Z-06	HYDRATED LIME FEED SYSTEM (TRAIN #2)	BID	LINE FEED AND DELIVERY SYSTEM			HALLIBURTON	004	1.5		\$13,500
91		4	02A	BIN VENT DUST COLLECTOR	BID	400 CFM			SPROUT BAUE	004	0.5		\$3,500
92		4	02B	DAY TANK	BID	800 CUBIC FEET			ROOTS	004	0.5		\$4,500
93		4	02C	ROTARY VALVE	BID	8' DIA X 8' L @ 10.9 RPM			SPROUT BAUE	004	2.0		\$4,500
94		4	02D	BLOWER	BID	5900 RPM @ 95 CFM @ 2 PSI			ROOTS	004	2.0		\$5,000
95		4	02E	SCREW CONVEYOR	BID	8' DIA X 7' @ 100 CFH			CONTINENTAL	004			\$3,000
96		4	02F	SURGE HOPPER	BID	50 CUBIC FEET			HALLIBURTON	004	0.5		\$3,500
97		4	02G	ROTARY FEEDER	BID	8' DIA X 8' L @ 4.4 RPM			SPROUT BAUE	004	0.5	V/S	\$3,500
98		4	02H	HYDRATED LIME WEIGH BELT FEEDER	BID	24" WIDE X 7' L @ 9 TPH			MERRICK	004	0.5		\$20,000

REV. NO.	EQUIP. NO.	EQUIPMENT NAME	PROCLURE TYPE	DESCRIPTION	PUMP TDH PSI	CAPACITY DESIGN NOMINAL	TYP VENDOR	PAD NO.	H.P.	DRIVE TYPE	COST
98	440-40-2-07	FEEDER SYSTEM (TAN 72)	BID	F-604 FEED AND DELIVERY SYSTEM				004	6.5	V/S	98,000
100	00A	BAR BREAKDOWN STORAGE HOPPER	BID	150 CUBIC FEET RUBBER LINED C.B. TANK				004	6.5	V/S	98,000
101	00B	ROTARY VALVE	BID	8" DIA X 8" WIDE @ 1 RPM				004	6.5	V/S	98,000
102	00C	F-604 WASH BELT FEEDER	BID	24" WIDE X 7' L @ 1.25 TPH				004	6.5	V/S	98,000
103	440-40-2-08	PLY ASH FEED SYSTEM (TAN 72)	BID	PLY ASH FEED AND DELIVERY SYSTEM				004	6.5	V/S	98,000
104	00A	SN VENT DUST COLLECTOR	BID	400 CFM				004	6.5	V/S	98,000
105	00B	DAY TANK	BID	1000 CUBIC FEET				004	6.5	V/S	98,000
106	00C	ROTARY VALVE	BID	14" DIA X 16" L @ 28 RPM				004	6.5	V/S	98,000
107	00D	BLOWER	BID	5800 RPM @ 86 CFM @ 2 PSI				004	6.5	V/S	98,000
108	00E	SCREW CONVEYOR	BID	12" DIA @ 780 CFM				004	6.5	V/S	98,000
109	00F	SUNGE HOPPER	BID	200 CUBIC FEET				004	6.5	V/S	98,000
110	00G	ROTARY FEEDER	BID	14" DIA X 8" L @ 28 RPM				004	6.5	V/S	98,000
111	00H	PLY ASH WASH BELT FEEDER	BID	24" WIDE X 7' L @ 1.25 TPH				004	6.5	V/S	98,000
112	440-40-P-25	HALF CRATE FEED PUMP #1A	BID	MODEL 2F038 F2000 PROGRESSIVE CAVITY PUMP	50	60 GPM		004	15.0	V/S	\$28,000
113	440-40-P-25-M1	HALF CRATE FEED PUMP #1B	BID	MODEL 2F038 F2000 PROGRESSIVE CAVITY PUMP	50	60 GPM		004	15.0	V/S	\$17,200
114	440-40-P-26	PROCESS WATER TANK	BID	6" DIA X 16" HIGH				004	15.0	V/S	\$17,200
115	440-40-P-26-M1	PROCESS WATER PUMP	BID	3" X1-1/2" - 8" HORIZ. CENT.	50	4200 GAL		004	15.0	V/S	\$4,700
116	440-30-B-00	PROCESS WATER PUMP	BID	TEFC	50	150 GPM		004	15.0	V/S	\$2,155
117	440-30-P-00	PROCESS WATER PUMP	BID	TEFC	50	150 GPM		004	15.0	V/S	\$2,155
118	440-30-P-00-M1	PROCESS WATER PUMP	BID	3" X1-1/2" - 8" HORIZ. CENT.	50	150 GPM		004	15.0	V/S	\$2,155
119	440-30-P-10	DIRTY WATER SEPARATOR	BID	TEFC	50	150 GPM		004	15.0	V/S	\$2,155
120	430-40-P-10-M1	SEPARATOR PUMP	BID	6" DIA X 6" W/COME BOTTOM TANK	50	1600 GAL		004	15.0	V/S	\$2,200
121	440-40-B-01	CEMENTING FLUSH WATER PUMP	BID	TEFC	50	50 GPM		004	7.5	V/S	\$15,800
122	440-40-P-05	CEMENTING FLUSH WATER PUMP	BID	TEFC	50	50 GPM		004	7.5	V/S	\$15,800
123	440-40-P-05-M1	CEMENTING FLUSH WATER PUMP	BID	6" DIA X 4" HIGH	40	300 GAL		004	7.5	V/S	\$800
124	440-40-BU-01	CEMENTING FLUSH WATER PUMP	BID	2" X 48" L VERT. CENT. MODEL 2-SFS-8100	40	125 GPM		004	15.0	V/S	\$5,570
125	440-40-P-06	AREA SUMP PUMP	BID	TEFC	40	125 GPM		004	15.0	V/S	\$5,570
126	440-40-P-06-M1	AREA SUMP PUMP	BID	2" X 48" L VERT. CENT. MODEL 2-SFS-8100	40	125 GPM		004	15.0	V/S	\$5,570
127	440-50-P-01	904 AREA ELECTRIC GENERATOR	BID	TEFC	40	125 GPM		004	15.0	V/S	\$5,550
128	440-50-P-01-M1	904 AREA AIR COMPRESSOR	BID	1500 KW DYSEL ELECTRIC GENERATOR	160	ACFM		004	15.0	V/S	\$160,000
129	440-50-B-01	PORTABLE SLUDGE VACUUM	BID	100 PSI @ 160 ACFM AIR COMPRESSOR	2	TPH		004	40.0	V/S	\$37,000
130	440-50-K-01		BID	TEFC				004	40.0	V/S	\$40,000
131	440-50-K-01-M1		BID	TEFC				004	40.0	V/S	\$40,000
132	440-50-W-01		BID	TEFC				004	40.0	V/S	\$40,000
133	440-50-W-01-M1		BID	TEFC				004	40.0	V/S	\$40,000
134			BID	TEFC				004	40.0	V/S	\$40,000
135			BID	TEFC				004	40.0	V/S	\$40,000
TOTALS											

NOTES F/S = FIXED SPEED  
V/S = VARIABLE SPEED  
MOTORS ARE 480V, 3 PHASE, 60 HZ  
FREQUENCY INVERTERS ARE ASSUMED.