BHP - 5

DRILLING SERVICES-BOYLES BROS.

a division of Layne Christensen Company

Boyles Bros. DRILLING COMPANY

CLIENT: BHP Copper Co DATE: 8-19-96

JOB#: 34-7025 JOB NAME: BHP Florence LOCATION: Florence

DRILL#: b468 ANGLE: Vert MSHA: PRE-SHIFT INSPECTION: EM

DRILLING AND CORING RECORD

SHIFT	HOLE SIZE	FROM	TO	TOTAL	RECOVERY	#RUNS	ROCK TYPE	HOLE #	HOLE CONDITIONS
DAY								BHP-1	
	16"	0	20	20				BHP-5	
REAM									
SWING									
REAM									
NIGHT									
REAM									

HOURLY ACTIVITIES

SHIFT	CORE	ROTARY	REV.CIRC	REAM	REDRILL	MOB/ DEMOB	WASH CLEAN HOLE	REGAIN LOST CIRC	SURVEY	CEMENT	CASING INSTALL	CASING REMOVE
DAY											10	
SWING												
NIGHT												

SHIFT	MOVE SETUP	STANDBY	MAINT. REPAIR	HOLE DELAY	WEATHER DELAY	WATER DELAY	WATER HAUL TRUCK #	MILES	HOURS	LOADS	OTHER SERVICES	
DAY												
SWING												
N[illegible]												

SHIFT		NAME	HOURS	EXPLAIN DELAYS, DIRECTIONS, ETC.
DAY	DRILLER	E-Manqum	10	Setup on BHP-1 Reamed Hole out To 16" Set & Cemented in 20' of 12" Casing
	HELPER	E-Tripp	10	
	OTHER	J. Granillo	10	Moved To BHP-5 (#27) Drilled To 20' & Set & Cemented in 21' of 12" Casing
SWING	DRILLER			
	HELPER			
	OTHER			
NIGHT	DRILLER			
	HELPER			
	OTHER			

CASING

SIZE	QUANTITY	LENGTH	CASING SHOES DAMAGED/LOST	CASING SET IN HOLE
BHP-1	20' x 12" x .375	Steel TYPE	DEPTH	SIZE
BHP-5	21' x 12" x .375	Steel NO Customer Supplied	SIZE	
BIT#	SIZE/TYPE	OFF ON	TOTAL	
BIT#	SIZE/TYPE	OFF ON	TOTAL	

MATERIALS

	QUANTITY DAY	SWING	NIGHT		QUANTITY DAY	SWING	NIGHT		QUANTITY DAY	SWING	NIGHT
MUD2				PORTLAND CEMENT				N BOXES			
C[illegible] MUD				CALSEAL				H BOXES			
				Premix BHP-1	12	BBDC	Furnished				
				Premix BHP-5	12						

FOREMAN [signature] GEOLOGIST

White : Customer Yellow : Office Pink : Foreman

DSC

DRILLING SERVICES-BOYLES BROS.

a division of Layne Christensen Company

Boyles Bros. DRILLING COMPANY

CLIENT: BHP Copper Co DATE: 9-30-96
JOB#: 34-7025 JOB NAME: BHP Florence LOCATION: Florence
DRILL#: 6468 ANGLE: Vert MSHA: PRE-SHIFT INSPECTION: Em

DRILLING AND CORING RECORD

SHIFT	HOLE SIZE	FROM	TO	TOTAL	RECOVERY	#RUNS	ROCK TYPE	HOLE #	HOLE CONDITIONS
DAY		403						BHP-5	
REAM									
SWING									
REAM									
NIGHT									
REAM									

HOURLY ACTIVITIES

SHIFT	CORE	ROTARY	REV.CIRC	REAM	REDRILL	MOB/ DEMOB	WASH CLEAN HOLE	REGAIN LOST CIRC	SURVEY	CEMENT	CASING INSTALL	CASING REMOVE
DAY										4	7	
SWING												
NIGHT												

SHIFT	MOVE SETUP	STANDBY	MAINT. REPAIR	HOLE DELAY	WEATHER DELAY	WATER DELAY	WATER HAUL TRUCK #	WATER HAUL MILES	WATER HAUL HOURS	WATER HAUL LOADS	OTHER SERVICES	
DAY							259	10		5		
SWING												
NIGHT												

SHIFT		NAME	HOURS	EXPLAIN DELAYS, DIRECTIONS, ETC.
DAY	DRILLER	E-Mangum	11	Run Pipe back To Bottom & Circulate - Tripout - Run 8" pvc w/ Electric wires alongside Strapped To Casing - Circulate 15000 gal water - mix barite mud & Cement - pumped 1300 gal Cement & 1000 gal mud - Clean up
	HELPER	E-Tripp	11	
	OTHER	J. Granillo	11	
SWING	DRILLER			
	HELPER			
	OTHER			
NIGHT	DRILLER			
	HELPER			
	OTHER			

CASING

SIZE	QUANTITY		LENGTH		CASING SHOES DAMAGED/LOST	CASING SET IN HOLE
8" Pvc	20		20'	TYPE Customer	DEPTH	SIZE
8" Pvc	1		3'	NO. Supplyed	SIZE	
BIT#	SIZE/TYPE	OFF		ON	TOTAL	
BIT#	SIZE/TYPE	OFF		ON	TOTAL	

MATERIALS

	QUANTITY DAY	QUANTITY SWING	QUANTITY NIGHT		QUANTITY DAY	QUANTITY SWING	QUANTITY NIGHT		QUANTITY DAY	QUANTITY SWING	QUANTITY NIGHT
MUD2	16			PORTLAND CEMENT	68			N BOXES			
CLEARMUD				CALSEAL				H BOXES			
				Stainless Centralizers	20			8 5/8 Cement Plug	1		
				Bara 200	133						

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DSC

DRILLING SERVICES-BOYLES BROS.

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Boyles Bros. DRILLING COMPANY

CLIENT: BHP Copper Co DATE: 10-9-96
JOB#: 34-7025 JOB NAME: BHP Florence LOCATION: Florence
DRILL#: 6468 ANGLE: Vert MSHA: PRE-SHIFT INSPECTION: Sm

DRILLING AND CORING RECORD

SHIFT	HOLE SIZE	FROM	TO	TOTAL	RECOVERY	#RUNS	ROCK TYPE	HOLE #	HOLE CONDITIONS
DAY								BHP-5	
REAM									
SWING									
REAM									
NIGHT									
REAM									

HOURLY ACTIVITIES

SHIFT	CORE	ROTARY	REV.CIRC	REAM	REDRILL	MOB/ DEMOB	WASH CLEAN HOLE	REGAIN LOST CIRC	SURVEY	CEMENT	CASING INSTALL	CASING REMOVE
DAY										2		
SWING												
NIGHT												

SHIFT	MOVE SETUP	STANDBY	MAINT. REPAIR	HOLE DELAY	WEATHER DELAY	WATER DELAY	WATER HAUL TRUCK #	WATER HAUL MILES	WATER HAUL HOURS	WATER HAUL LOADS	OTHER SERVICES	
DAY												
SWING												
NIGHT												

SHIFT		NAME	HOURS	EXPLAIN DELAYS, DIRECTIONS, ETC.
DAY	DRILLER	E-Mangum	2	mix & pump 700 gal Cement
	HELPER	E-Tripp	2	Pull Trimie
	OTHER	J. Granillo	2	
SWING	DRILLER			
	HELPER			
	OTHER			
NIGHT	DRILLER			
	HELPER			
	OTHER			

CASING

SIZE	QUANTITY		LENGTH		CASING SHOES DAMAGED/LOST		CASING SET IN HOLE
				TYPE	DEPTH	SIZE	
				NO.	SIZE		
BIT#	SIZE/TYPE	OFF		ON	TOTAL		
BIT#	SIZE/TYPE	OFF		ON	TOTAL		

MATERIALS

	QUANTITY DAY	QUANTITY SWING	QUANTITY NIGHT		QUANTITY DAY	QUANTITY SWING	QUANTITY NIGHT		QUANTITY DAY	QUANTITY SWING	QUANTITY NIGHT
MUD2	2			PORTLAND CEMENT	38			N BOXES			
CLEARMUD				CALSEAL				H BOXES			

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