



LIGNITE/LIGNOSULFONATE

Date: May 17, 1983

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	<u>Corpus Christi, Texas 78475</u>	<u>512/882-7487</u>
	<u>(Address)</u>	<u>(Phone)</u>

LOCAL BAROID PERSONNEL

	<u>Address</u>	<u>Phone</u>
Engineer <u>To be assigned</u>	<u></u>	<u></u>
Dist. Engr. <u>Wayne Shepherd</u>	<u>Beeville, Texas</u>	<u>512/358-5280</u>
Dist. Mgr. <u>Rick Kidd</u>	<u>Corpus Christi, Texas</u>	<u>512/882-7487</u>

Baroid Service Center nearest to well:

Beeville, Texas Phone No. 512/358-5280

This store has:

Bulk Baroid
 Complete Stock Sack Materials
 Corrosion Treating Chemicals
 Delivery Service

Radio Communication
 Liquid Oil Mud
 Solids Control Equipment
 Logging Services

Prepared For:

United States Federal Government
c/o R. W. Dirks Petroleum Engineer Inc.
Attention: J. R. Fischer
P. O. Drawer 200
Tuleta, Texas 78162-0200

Field Lackland AFB Well Lackland #1
 County Bexar State Texas

UNITED STATES FEDERAL GOVERNMENT
C/O R. W. DIRKS PETROLEUM ENGINEER INC.
LACKLAND #1
BEXAR COUNTY, TEXAS

PROGNOSIS

OBJECTIVE

The operator proposes to drill to a total depth of 4200' to test for production. Location is on Lackland Airforce Base, Bexar County, Texas.

GEOLOGICAL CONTROL

This mud program is based on the following wells:

Coastal States	-	Loessberg #1
Pagenkopf	-	Blum #1
General Crude	-	Rogers Ranch #1
General Crude	-	Talley #1

RECOMMENDED MUD TYPE

0-1100'	Native Spud Mud, AQUAGEL, lime, water.
1100-2000'	Native Mud: AQUAGEL, BARAFOS, CON DET.
2000-4200'	Lignite/Lignosulfonate: Q-BROXIN, CARBONOX, Caustic Soda, Barite, water.

RECOMMENDED EQUIPMENT

0-1100'	Rig Shaker/Desander/Desilter.
1100-4200'	Baroid Double Deck Shaker/Desander-Desilter as required/Degasser.

CASING DESIGN

<u>Depth</u>	<u>Hole Size</u>	<u>Casing Size</u>	<u>Est. Fracture Gradient @ Casing Seat</u>
1100'	14-3/4"	10-3/4"	13.2 ppg
4200'	9-7/8"	7"	---

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Bexar County, Texas
Prognosis (cont'd.)

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DRILLING PRECAUTIONS

Abnormal Pressure - Your proposed well anticipates encountering minimal abnormal pressure. In this case, abnormal pressure is defined as any pressure that exceeds 0.465 psi/foot (8.9 lbs/gal). A maximum anticipated mud weight of 9.2-9.4 ppg is expected at total depth.

It is recommended that trip gas, connection gas and total gas should be carefully monitored. "Drilling breaks" should be properly checked, especially for increase in differential chlorides or gas-cut mud.

Avoid excessive swabbing while tripping, keep hole full at all times and check for well flowing as conditions warrant.

Lost Circulation - If seepage is encountered, we recommend mixing 3-4#/barrel fine mica. For severe lost circulation, if reducing mud weight is not possible, we recommend using a DIASEAL M squeeze.

Stuck Pipe - Stuck pipe is usually the result of "differential sticking". The term differential sticking refers to a stuck pipe condition that occurs when the drill string comes into contact with a permeable formation and is then held in place by the differential existing between the mud column and the formation.

It is important to note that the mud density does not have to be high for differential sticking to occur. This phenomena can occur with mud densities ranging from 10.0 lbs/gal. to 18.0 lbs/gal. The hydrostatic pressure of the mud has only to be significantly higher than the formation and the mud contain enough solids to form a wall cake.

Since differential sticking intensifies exponentially with time, it is important that proper remedial action be taken immediately after the pipe becomes wall stuck. Remedial action involves (1) estimation of free point, and (2) spotting a fluid to relieve the condition. We recommend EZ-SPOT.

Lubrication - Historically, the addition of Diesel Oil to drilling fluids has been credited with benefits such as (1) increased penetration rates, (2) reduced torque and drag, (3) reduced bit balling, and (4) prolonged bit life. Recent field and laboratory data indicates that the Baroid product TORQ-TRIM II fulfills these benefits and at the same time, eliminates concerns dictated by ecological and/or geological concerns. The usual concentration of this nontoxic, nonpolluting, biodegradable additive is 3-6 lbs/bbl.

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Prognosis (cont'd.)

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Recently Baroid introduced a new lubricant to its product line. LUBRA-BEADS is a plastic sphere lubricant that offers an option to TORQ-TRIM II. It provides effective lubrication with advantages such as: no pollution hazard, reduction or elimination of bit balling, and improved filtration control. LUBRA-BEADS has proven successful in effectively reducing torque and/or drag, especially in sensitive environmental or geographical areas. Problems associated with torque and/or drag can be avoided by maintaining a LUBRA-BEADS concentration of 4-8 lbs/bbl.

Sloughing Shale - If encountered, we recommend increasing viscosity first to help clean hole. It might also be necessary to increase mud weight and lower filtration rate. SOLTEX may also aid to prevent hole sloughing in water base muds.

RECOMMENDED MUD PROGRAM

NL Baroid/NL Industries, Inc



United States Federal Government
c/o R. W. Dirks Petroleum Engineer Inc.

Company _____ Date May 17, 1983

Well Name and Number Lackland #1 Proposed Depth 4200'

Location Lackland AFB County Bexar State Texas

Casing: Surf. 10-3/4" @ 1100' Inter. 9-7/8" Bit Prod. 7" @ T.D.

RECOMMENDED MUD PROPERTIES

TREATMENT

DEPTH FEET	WEIGHT LB/GAL	VISCOSITY SEC.	FILTRATE ml	TREATMENT
0-1100'	9.0-9.2	34-40	N.C.	Native Mud: AQUAGEL, lime, water.
1100-2000'	9.0-9.2	34-40	10-25	Native Mud: AQUAGEL, BARAFOS, CON DET.
2000-3000'	9.0-9.2	34-40	8-10	Lignite/Lignosulfonate: Begin additions of Q-BROXIN, CARBONOX and Caustic Soda.
3000-3500'	9.2-9.4	36-42	6-8	
3500-4200'	9.2-9.4*	36-42	5-6	

*Adjust mud weights as hole conditions dictate.

Estimated cost for mud materials: \$5,500 - \$6,000 (See Cost Estimate)

Recommended Program Based Upon

See Prognosis

The above recommendations are statements of opinion only, and are made without any warranty of any kind as to performance and without assumption of any liability by N L Industries, Inc., or its agents.

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LACKLAND #1
BEXAR COUNTY, TEXAS

DEPTH INTERVAL DISCUSSION

0-1100'

A simple AQUAGEL/water mud is satisfactory for drilling the surface hole. Should solids removal be a problem, lime may be added to flocculate the system to provide additional carrying capacity. Desanders/desilters should be operable and fully utilized throughout this interval.

1100-2000'

Use a native mud supplemented with AQUAGEL. The AQUAGEL should be added at the rate of 2-3 sacks per 100' of new hole drilled and will promote good hole cleaning and wellbore stabilization. CON DET will provide lubricity and 'rock wetability' as an aid toward achieving maximum penetration rates. BARAFOS will provide additional rheological control.

2000-4200'

Begin treatment with Caustic Soda, Q-BROXIN and CARBONOX. Q-BROXIN (a lignosulfonate) is the most versatile and effective organic thinner available. This versatility stems from the ability of Q-BROXIN to function in the medium pH range in the presence of electrolytes. Its use is not, however, restricted to fluids containing electrolytes. CARBONOX is a partially refined lignite which is used for general thinning and filtration control. This material has excellent temperature stability. Good Bentonite content should be maintained throughout this interval.

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 LACKLAND #1
 BEXAR COUNTY, TEXAS

COST ESTIMATE

		<u>CUMULATIVE COST</u>
<u>0-1100'</u>		
Hole Size: 14-3/4"		
Estimated Pit Volume:	250 bbls.	
Estimated Days to Drill:	2	
Estimated Volume:	475 bbls.	
Estimated Initial Cost:	\$ 500.00	\$ 500.00
 <u>1100-2000'</u>		
Casing: 10-3/4" @ 1100'		
Hole Size: 9-7/8"		
Estimated Days to Drill:	2	
Estimated Volume:	445 bbls.	
Estimated Maintenance Cost:	\$ 700.00	
Barite (Slugs):	<u>\$ 200.00</u>	
Estimated Interval Cost:	\$ 900.00	\$1,400.00
 <u>2000-4200'</u>		
Casing: 10-3/4" @ 1100'		
Hole Size: 9-7/8"		
Estimated Days to Drill:	6	
Estimated Volume:	650 bbls.	
Estimated Maintenance Cost:	\$3,000.00	
Barite (Slugs):	<u>\$ 600.00</u>	
Estimated Interval Cost:	\$3,600.00	\$5,000.00
Estimated Sales Tax:	\$ 250.00	\$5,250.00
Estimated Drayage:	\$ 400.00	\$5,650.00
 TOTAL ESTIMATED DAYS TO DRILL:	 <u>10±</u>	
TOTAL ESTIMATED MUD COST:	<u>\$5,650.00</u>	



WELL DATA SHEET

MAG-380-A

OPERATOR COASTAL STATES GAS PRODUCING	SURVEY SEC. T R	CASING SIZE 13-3/8" at 80'	DEPTH 80'	BIT SIZE
WELL Loesberg #1	FIELD Fairfield - McDona - Lytle	SURFACE 8-5/8" at 2555'	BIT SIZE 7-7/8" - 9	
CONTRACTOR Cibolo Drilling Company	COUNTY Bexar	INTERMEDIATE		
ENGINEER Lloyd West	STATE Texas	PRODUCTION Dry Hole		

DATE 1973	DEPTH	WT.	VIS.	AV	PV	YP	GELS	PH	W/L	PF	CL PPM.	CA PPM.	SOL %	OIL %	H.T.H.P.	TOTAL MUD COST:	TOTAL DEPTH:
																\$3,721.00	5200'
REMARKS																	
3-31	935	9.3	31		10	10	2 5	9.0	14.0	TR.	400	20	7				
4-1	1300	9.3	36		8	7	2 7	10.0	12.0	05	550	40	7				
4-2	1884	9.4	34		6	4	2 4	9.0	18.0	.1	400	NIL					
4-3	2009	9.2	33		5	4	1 3	9.0	22.0	.1	350	NIL	6				
4-4	2225	9.1	31		7	3	2 4	8.5	26.0	.1	400	NIL	6				
4-5	2412	9.2	34		5	5	2 3	10.0	15.0	.1	400	TR.	6				
4-6	2526	9.3	40		10	10	2 10	9.0	12.2	05	450	TR.	7				
4-10	3200	9.2	30		5	5	1 2	9.5	30.0	05	350	120	7				
4-11	3300	9.3	32		10	5	2 4	10.5	18.0	.18	400	40	7				
4-13	3650	9.4	37		13	4	0 2	10.5	9.4	.2	450	40					
4-13	3806	9.7	47		26	18	3 6	9.0	8.0	05	350	130	9				
4-14	4120	9.3	35		9	4	2 5	9.2	8.0	.2	400	100	7				
4-15	4365	9.4	35		9	3	?	9.3	8.2	.1	400	80	8				
4-16	4700	9.4	36		11	7	6 14	8.5	9.4	.1	300	80	8				
4-19	5178	9.5	42		18	5	0 2	8.0	7.8	.1	400	140	9				

Drilled through Edwards sand with no trouble; then shot 8-5/8inch casing at 2555feet.

No Hole or Mud trouble

DATE SPUD: 3-30-73	DATE T.O.: 4-23-73	B.H.T.	COMPLETION FLUID TYPE:	COST:
			BACKER MUD TYPE:	

Schlumberger

QUAL INDUCTION LATEROLOG
WITH LINEAR CORRELATION LOG

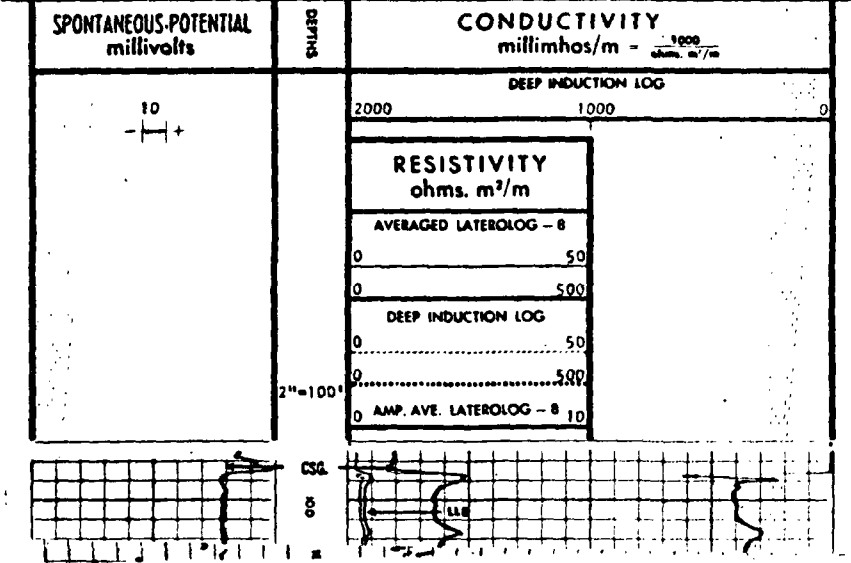
COUNTY <u>BEJAR</u>		COMPANY <u>COASTAL STATES GAS PRODUCING COMPANY</u>	
FIELD & LOCATION <u>FAIRFIELD</u>		WELL <u>C.R. LOESSBERG #1</u>	
WELL <u>C.R. LOESSBERG #1</u>		FIELD <u>FAIRFIELD</u>	
COUNTY <u>BEJAR</u> STATE <u>TEXAS</u>		LOCATION <u>9550 PSL & 2150 F.W. OF JUN DE DIOS METROS SUR. #8, A-543</u>	
Permanent Datum <u>GROUND LEVEL</u> Elevation <u>706</u>		Log Measured From <u>KB</u> Elevation <u>706</u>	
Drilling Measured From <u>KB</u> Elevation <u>706</u>		Other Services <u>FDC/CML/GAR BHC</u>	
Date <u>4-6-73</u>	Log No. <u>ONE</u>	Date <u>4-20-73</u>	Log No. <u>TWO</u>
Depth - Driller <u>2550</u>	Depth - Logger <u>2550</u>	Depth - Driller <u>2550</u>	Depth - Logger <u>2550</u>
Top Log Interval <u>83</u>	Top Log Interval <u>83</u>	Top Log Interval <u>83</u>	Top Log Interval <u>83</u>
Counting - Driller <u>13.1/8880</u>	Counting - Logger <u>8.57/88555</u>	Counting - Driller <u>83</u>	Counting - Logger <u>2558</u>
Bit Size <u>12 1/4"</u>	Bit Size <u>7 7/8"</u>	Bit Size <u>12 1/4"</u>	Bit Size <u>7 7/8"</u>
Type Fluid in Hole <u>WATER/GEL</u>	Type Fluid in Hole <u>LO PH</u>	Type Fluid in Hole <u>WATER/GEL</u>	Type Fluid in Hole <u>LO PH</u>
Dens. <u>9.3</u>	Visc. <u>40</u>	Dens. <u>9.5</u>	Visc. <u>48</u>
pH <u>9.0</u>	Fluid Loss <u>12.2nd 8.2</u>	pH <u>6.9</u>	Fluid Loss <u>nd</u>
Source of Sample <u>FLUID LINE</u>	Source of Sample <u>PIT</u>	Source of Sample <u>FLUID LINE</u>	Source of Sample <u>PIT</u>
R. @ Meas. Temp. <u>3.29 @ 70°F</u>	R. @ Meas. Temp. <u>2.09 @ 70°F</u>	R. @ Meas. Temp. <u>3.29 @ 70°F</u>	R. @ Meas. Temp. <u>2.09 @ 70°F</u>
S. @ Meas. Temp. <u>2.1 @ 70°F</u>	S. @ Meas. Temp. <u>1.10 @ 70°F</u>	S. @ Meas. Temp. <u>2.1 @ 70°F</u>	S. @ Meas. Temp. <u>1.10 @ 70°F</u>
Temp. @ Meas. <u>70</u>	Temp. @ Meas. <u>70</u>	Temp. @ Meas. <u>70</u>	Temp. @ Meas. <u>70</u>
Time Since Circ. <u>2.7</u>	Time Since Circ. <u>01:00</u>	Time Since Circ. <u>2.7</u>	Time Since Circ. <u>01:00</u>
Equip. Location <u>PLEAS 76/76</u>	Equip. Location <u>PLEAS 76/76</u>	Equip. Location <u>PLEAS 76/76</u>	Equip. Location <u>PLEAS 76/76</u>
Witnessed by <u>MR. VALENTIN</u>	Witnessed by <u>MR. VALENTIN</u>	Witnessed by <u>MR. VALENTIN</u>	Witnessed by <u>MR. VALENTIN</u>

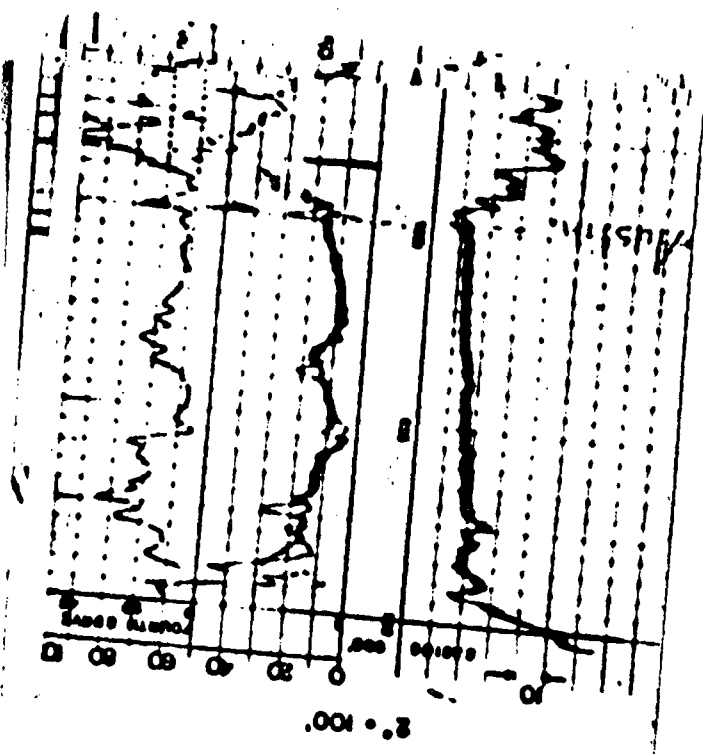
REMARKS: The well name, location and borehole reference data were furnished by the customer.

REMARKS SO # 83371,78440

Changes in Mud Type or Additional Samples	Type Log	Depth	Scale Changes	Scale Down Hole
Date Sample No.	RES.	1110	Scale Up Hole	0-100
Depth - Driller	COND.	1110	0-1000	0-200
Type Fluid in Hole	RES.	2558	0-100	0-50
Dens. Visc.	COND.	2558	0-200	0-1000
pH Fluid Loss				
Source of Sample	Run No.	Tool Type	Tool Position	Other
R. @ Meas. Temp.				
S. @ Meas. Temp.				
Temp. @ Meas.				
Time Since Circ.				
Equip. Location				
Witnessed by				

Check one, filling in blanks where applicable:
 Surface determined sonde errors used for ILM and ILD.
 ILM and ILD sonde errors corrected for _____ inch borehole signal at R = _____
 ILM and ILD zeros set in hole at depth of _____ feet.





SELF-POTENTIAL	RESISTIVITY
DATE	OBSERVERS

9.0 PPS

QUARTER OF HOUR AND CHARACTERISTICS

1st Quarter
 2nd Quarter
 3rd Quarter
 4th Quarter

1st Quarter
 2nd Quarter
 3rd Quarter
 4th Quarter

LOCATION OF WELL
 SECTION NO. 11111
 STATE 7777
 COUNTY 8888
 SURVEY 9999
 FIELD 1111
 WELL NO. 2222
 WELL 3333
 COMPANY 4444
 DATE 5555

COUNTY 6666
 SURVEY 7777
 FIELD 8888
 WELL NO. 9999
 WELL 1111
 COMPANY 2222
 DATE 3333

SCHEIDT & BOND WELL SURVEYING CORPORATION
 2011 1911



Electrical Log

COUNTY: **BEAR**
 WELL NO: **WILDCAT**
 LOCATION: **ROGERS RANCH #1**
 COMPANY: **GENERAL CRUDE OIL COMPANY**

COMPANY: **GENERAL CRUDE OIL COMPANY**
 WELL: **ROGERS RANCH #1**
 FIELD: **WILDCAT**
 LOCATION: **J. S. COLLARD SUR. #256, A-15**
 COUNTY: **BEAR**
 STATE: **TEXAS**

Location of Well: **1100' SW. 8 1950' SEL. OF 320 AC. TR. 8 OF J. S. COLLARD SURVEY #256, A-15. (8 MILES WEST OF SAN ANTONIO) (NE. 10M)**
 Elevation: **D.P. 820 E.A. 812 G.L. 812**
 FILING No. **56-20**

Run No.	ONE	TWO	THREE
Date	8-14-54	8-30-54	10-17-54
Log Reading	1086	5030	5095
Core Reading	250	1044	5030
Core Measured	199	3986	865
Core Station	-	1044	-
Core Driller	-	1044	-
Depth Reached	1047	5031	5096
Bottom Driller	1069	5031	5096
Depth Datum	10.5	12.5	ABOVE BL
Fluid	NATURAL	NATURAL	NATURAL
Density	•	10.1	10.2
Viscosity	•	•	•
Permeability	•	2.5	0.7
Resistivity	•	1.8	1.1
Sp. Grav.	•	•	•
Wt. Loss	•	•	•
W.C. Temp.	•	117° F	123° F
Bit Size	12-3/4	•	•
Sp. Gr. - AM	16	16	16
AM	16	16	16
AO	18.8	18.8	18.8
Op. Rig Time	11.5 HRS	21 HRS	31 HRS
Tract No.	720 PC	720 PC	720 PC
Recorded by	ALLEN	HARSH	MARTIN
Witness by MR	•	•	•

REMARKS: **NO AVAILABLE LOGS RETURNED AND NO LOG AVAILABLE**
LOGS RETURNED TO BEAR 8/14/54
LOGS RETURNED TO BEAR 10/17/54
LOGS RETURNED TO BEAR 8/30/54





Schlumberger Well Services Corporation
 DIVISION OF Schlumberger Ltd.

COUNTY	BEAR
FIELD	MILDCAT
LOCATION	JAMES MADY TALLEY
WELL	
COMPANY	GENERAL CRUDE OIL
STATE	TEXAS
COUNTY	BEAR
FIELD	MILDCAT
LOCATION	T. R. EDMONDSON SURVEY #203
WELL	JAMES MADY TALLEY
NO.	41
LOCATION	MILDCAT
NO.	
LOCATION	T. R. EDMONDSON SURVEY #203
NO.	

Run No.	One	Two	Three	Four	Five
Run No.	1	2	3	4	5
Depth	10'	20'	30'	40'	50'
Temp.	15°	16°	17°	18°	19°
Pressure	100	105	110	115	120
Resistivity	1000	1000	1000	1000	1000
Spontaneous Potential	0	0	0	0	0

NOT AVAILABLE
 LOCATION COUNTY T. R. EDMONDSON SURVEY #203, (13 MI. N. OF SAN ANTONIO) (M)
 RUN #1 - LOST RETURNS AND NO MUD AVAILABLE
 RUN #2 - MUD SAMPLE OBTAINED FROM PIT
 LESS THAN 100'

SPONTANEOUS POTENTIAL millivolts	RESISTIVITY -ohms. m ² /m	RESISTIVITY -ohms. m ² /m
- 10 +	0 AMP. AM 16" 200	
	0 AM - 16" 1000	0 AO - 18" 1000
	0 AM 16" 10000	0 AO - 18" 10000
	0 AM - 64" 1000	
	0 AM - 64" 10000	
	25100	

