	If earthen pits are a association with the	e drilling of th	Ñ.Ñ	Singi C	ber instruc		FURM AF OMB NO. Expires: Febr	1004-0136 14ry 28, 1995
A :	Wall on the last -		7 .	26 17 11. 3	Grand	1 Ava	MONM-92180	AND SERIAL NO.
	obtained prior to p	it construction	-W.C.	ARANA	= A BM		6. IF INDIAN, ALLOTT	OR TRIRE WALLE
A. TIPE OF WORK		SE	HIL.	ETARY'		8821	Ø	
	ORILL 🖾	DEEPEN		CIAKI	SPUIA	12H	7. UNIT AGREEMENT	EMAN
OIL X WELL X	CAS WELL OTHER			NGLE KX	MULTIP	LE [GOLD RUSH 3	FEDERAL
MARALO, LLC	. (PHILLIP SMI	TH 432-684-	7441)			9. AFI WELL NO.	
ADDRESS AND TELEPHONE	_			· · · · · · · · · · · · · · · · · · ·			30-015-	32768
P.O. BOX 83	Report location clearly an		•	32-684-74	,		10. FIELD AND POOL,	
At surface	1750' FEL SECTI		-	-	3€CEI\		NASH DRAW-BRU 11. SEC., T., E., M., OR AND SURVEY OR SECTION 31 T	BLK.
1 DISTINCT IN WILL	S AND DIRECTION FROM NE.	DEST TOWN AS BOST	OFFIC		SEP 29		12. COUNTY OR PARIS	
	ely 12 miles East			_	OD:AD	TESIA	EDDY CO.	NM
5. DISTANCE FROM PR	OPUSED*	1		O. OF ACRES IN		17. NO. C	OF ACRES ASSIGNED	1 1111
LOCATION TO NEAR PROPERTY OR LEAS (Also to nearest of the control	E LINE, FT. drlg. unit line, if any)	990!	10 70	960			HIS WELL 40	
TO NEAREST WELL OR APPLIED FOR, ON	, DRILLING, COMPLETED, THIS LEASE, FT.	1320'		7450'		ROTAL	RY	
	whether DF, RT, GR. etc.)	3113' GR	•				WHEN APPROVE	
•		PROPOSED CASE	IG ANI	CEMENTING	PROGRAM	CARL	SBAD CONTROLL	ED WATER BA
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FO	от	SETTING I	EPTH	1	QUANTITY OF CEME	NT
25''	20" Conductor	NA		40'		Cemen	t to surface W	/Redi-mix
17½"	J-55 13 3/8"	54.5		650 W	VITNES:	750 Sz	x. Circulate c	ement to su
12½" 7 7/8"	J-55 8 5/8" J-55 5½"	32 15.5		7450'	VERIVEZ	1000 5		11 11
mix. Drill $17\frac{1}{2}$ " with 500 Sx	hole to 40'. Set hole to 650'. Ru of Halco Light CaCl, + ½# Floc	n and set 65 cement + ad	0' o diti	f 13 3/8" ves, tail	54.5# in wi	J-55 S th 250	ST&C casing. C	ement
with 925 Sx	hole to 3100'. R. of Class "C" H. ement + 2% CaCl,	alco Light c	emen	t + addit	ives,	tail in	n with 250 Sx.	ment of
with 700 Sx	" hole to 7450' of Class "H" H remium Plus ceme	alco LIght c	emen	t + addit	ives,	tail in	n with 300 Sx.	
AND	WELL WAS ORIGIN WELL WAS NOT DRI							
ABOVE SPACE DESCI	RIBE PROPOSED PROGRAM: I	f proposal is to deepen, gons and measured and tr	ive data se vertica	on present produ al depths. Give bl	active zone a	nd proposed iter program,	I new productive zone. If if any.	proposal is to drill or
SIGNED	et Jan	ica TITE	.EA	gent	WAT 5	UBJE(CT TOATE 07/09	/04
(This space for F	ederal or State office use)			CENTEL	AT DE	α	EMENTS PULATIONS	
PERMIT NO.				GALLINGSPRIA	THED.	n orm	11	anduct operations there
	es not warrant or certify that the a	pplicant holds legal or equ	utable tit	ie to <i>ft</i> hose digitis v	n∕ the subjec t le	ense which w	ome eunne me abblicant to e	same operations thereto
CONDITIONS OF APPRO	YALL IF ANT:	A	CTD	NO				2004
KILI	Illian S. Cond			STATE D	IRECT	OR	2 1 SEP	<u> </u>

State of New Mexico

DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

Santa Fe, New Mexico 87504-2088

P.O. Box 2088

DISTRICT IV

DISTRICT III

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

.O. BOX 2088, SANTA FE, N.M. 87504-20		ACKEAGE DEDICATION I BAT	☐ AMENDED	REPORT
API Number	Pool Code 47545			
Property Code 21118	•	Property Name GOLD RUSH "31" FEDERAL		
0GRID No. 14007	-	ALO, LLC	Elevation 3113'	

Surface Location

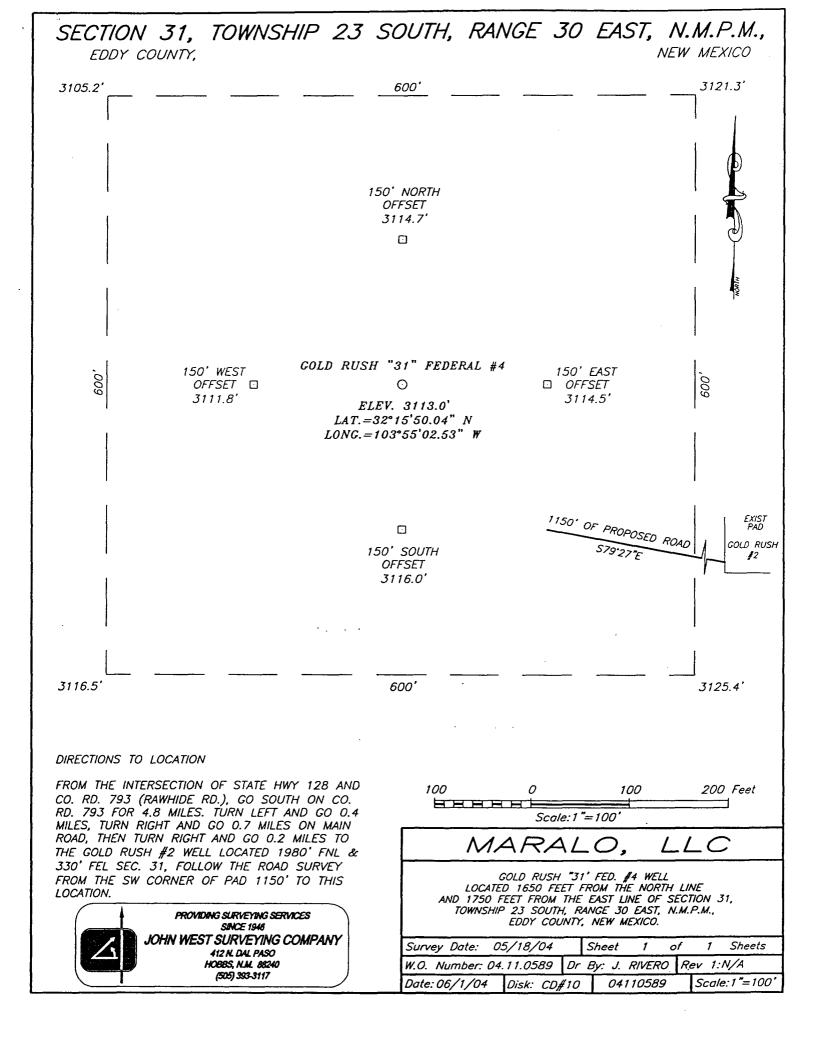
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	31	23-S	30-E		1650'	NORTH	1750'	EAST	EDDY

Bottom Hole Location If Different From Surface

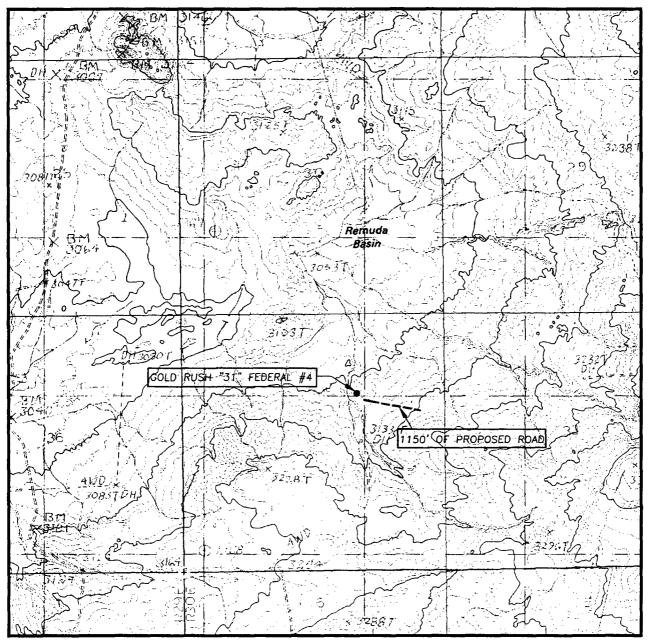
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Or	der No.	1		I	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

	OR A NON-STANDARD UNIT HAS BEEN APPROVED BY	THE DIVISION
LOT 1	3105.2: 3121.3' 1750' 1750' 3116.5' 3121.4'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Joe T. Janica Printed Name Agent Title 07/09/04
LOT 3	GEODETIC COORDINATES NAD 27 NME Y=459973.5 N X=628576.5 E	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.
LOT 4	LAT.=32·15'50.04" N LONG.=103·55'02.53" W	Date Surveyed JR Signature & Sea F of The Professional Surveyor Of The Pr



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: REMUDA BASIN, N.M. — 10'

SEC. 31 TWP. 23-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1650' FNL & 1750' FEL

ELEVATION 3113'

OPERATOR MARALO, LLC

LEASE GOLD RUSH "31" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

REMUDA BASIN, N.M.





APPLICATION TO DRILL

MARALO LLC.

GOLD RUSH "31" FEDERAL # 4
UNIT "G" SECTION 31
T23S-R30E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

- 1. Location of well: 1650' FNL & 1750' FEL SECTION 31 T23S-R30E EDDY CO. NM
- 2. Ground Elevation above Sea Level: 3112 GR.
- 3. Geological age of surface formation: Quaternary Deposits:
- 4. <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
- 5. Proposed drilling depth: 7450

6. Estimated tops of geological markers:

Lamar	3290'	Brushy Canyon	6350 '
Bell Canyon	4280 '	Bone Spring	7080'
Cherry Canyon	5780 '	Avalon Sand	7190 '

7. Possible mineral bearing formations:

Brushy Canyon Oil
Bone Spring Oil
Avalon Sand Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-650	13 3/8"	54.5	8-R	ST&C	J - 55
12½"	0-3100'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-7450'	5½"	15.5	8-R	LT&C	J_55

APPLICATION TO DRILL

MARALO LLC.

GOLD RUSH "31" FEDERAL # 4
UNIT "G" SECTION 31
T23S-R30E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface Redi-mix.
13 3/8"	Surface	Set 650' of 13 $3/8$ " $54.5\#$ J-55 ST&C casing. Cement with 500 Sx. of Halco Light + additives, tail in with 250 Sx. of Class "C" + 2% CaCl, + $\frac{1}{2}\#$ Flocele/Sx. Circulate cement.
8 5/8''	Intermediate	Set 3100' of 8 5/8" 32# J-55 ST&C casing. CEment with 925 Sx. of Halco Light + additives, tail in with 250 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{2}$ # Flocele/Sx. circulate cement to surface.
5½''	Production	Set 7450' of $5\frac{1}{2}$ " 15.5# J-55 LT&C Casing. Cement with 700 Sx. of Halco Light cement + additives, tail in with300 Sx. of Class "H" Modified + additives, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working perssure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
DEFIR	MOD WI.	V13C.	FEOID LOSS	THE HOD STOTELL
40-650 '	8.4-8.7	29-34	NC	Fresh water use paper to control seepage.
650-3100'	10.0-10.2	29–38	NC	Brine water add paper to control seepage & High viscosity sweeps to clean hole.
3100-6900'	8.4-8.7	29–38	NC	Fresh water use Gel for for high viscosity sweeps to clean hole.
6900 - 7450 '	8.4-8.7	34-40	10 cc or less	Same as above add a Polyto reduce water loss and Gel for viscosity use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

MARALO LLC.

GOLD RUSH "31" FEDERAL # 4
UNIT "G" SECTION 31
T23S-R30E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, CNL, LDT, Gamma Ray and CAliper from TD back to 3100'.
- B. Run Gamma Ray, CNL from 3100' back to surface.
- C. Mud logger will be placed on hole at 3100' and remain on hole to TD.
- D. No DST's or cores are planed at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of ${\rm H^2S}$ in this area. If ${\rm H^2S}$ is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3800 PSI, and Estimated BHT 150°

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 22 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

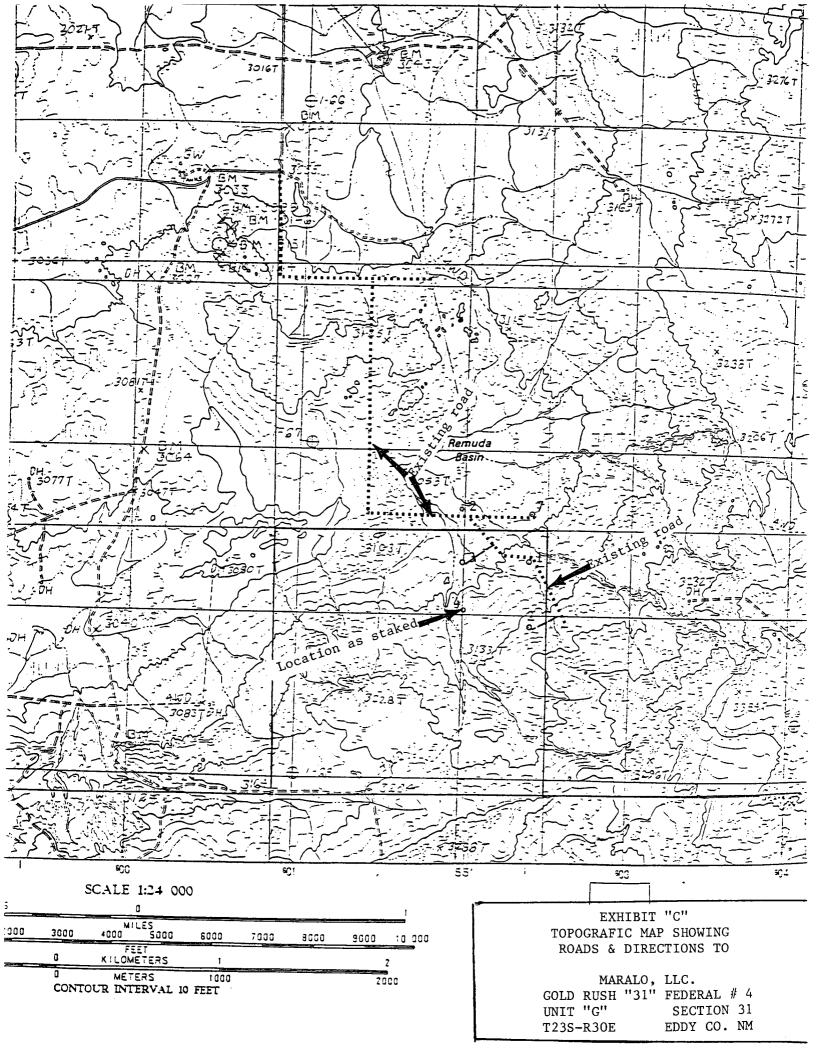
15. OTHER FACETS OF OPERATIONS:

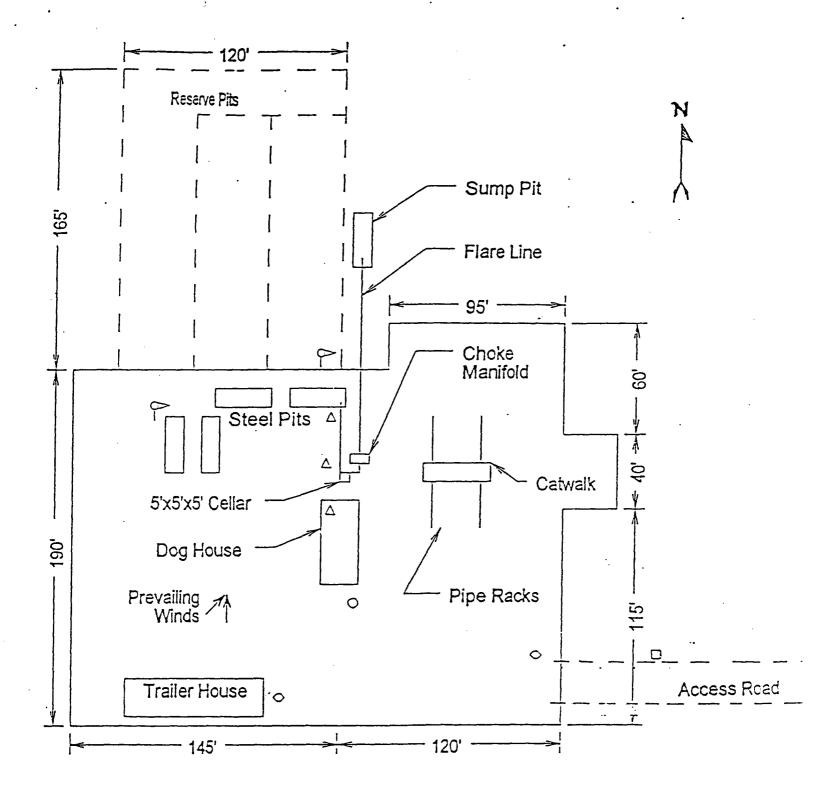
After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The <u>BRUSHY CANYON</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazzards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
- 4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
 - A. See exhibit "E" & "E-1"
- 6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If the location is near to a dwelling a closed DST will be performed.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
- 9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.



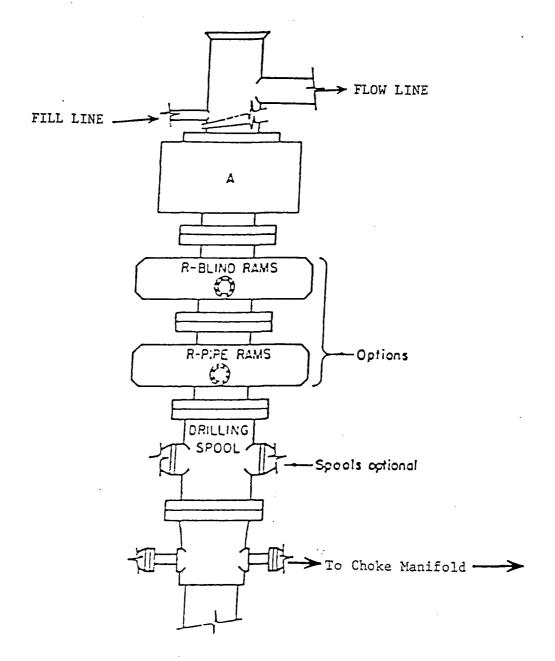


- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- O Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

MARALO, LLC.

GOLD RUSH "31" FEDERAL # 4
UNIT "G" SECTION 31
T23S-R30E EDDY CO. NM



ARRANGEMENT SRRA

900 Series 3000 PSI WP

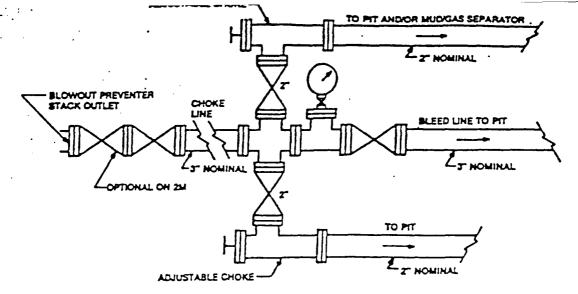
EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

MARALO, LLC

GOLD RUSH "31" FEDERAL # 4
UNIT "G" SECTION 31

T23S-R30E

EDDY CO. NM



Typical choke manifold assembly for 3M WP system

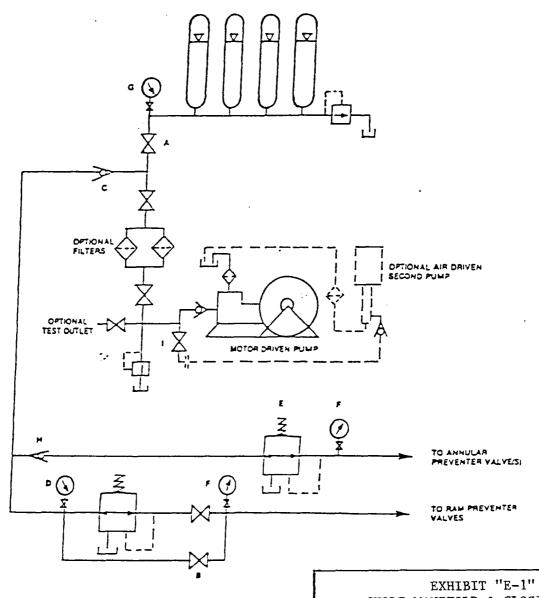


EXHIBIT "E-1"
CHOLE MANIFOLD & CLOSING UNIT

MARALO, GOLD RUSH "31" FEDERAL # 4
UNIT "G" SECTION 31
T23S-R30E EDDY CO. NM