

Operator Name/Number: OXY USA Inc. 16696
 Lease Name/Number: Copperhead 18 DM-CN State #1H State Lease No. VO-5638
 Pool Name/Number: Triple X Bone Spring, West 96674
 Surface Location: 150 FNL 1420 FWL C Sec 18 T24S R33E
 Top Perf: 330 FNL 1420 FWL C Sec 18 T24S R33E
 Bottom Perf: 330 FSL 1420 FWL N Sec 18 T24S R33E
 Bottom Hole Location: 180 FSL 1420 FWL N Sec 18 T24S R33E

C-102 Plats: 1/30/15 2/4/15 2/10/15 Elevation: 3569.9' GL Objective: 2nd Bone Spring

Proposed TD: Horizontal Lateral 11080' TVD 15785' TMD
 SL - Lat: 32.2244092 Long: 103.6147283 X=722222.03 Y=446102.21 NAD - 1927
 TP - Lat: 32.2239144 Long: 103.6147288 X=722223.07 Y=445922.21 NAD - 1927
 BP - Lat: 32.2112115 Long: 103.6147406 X=722250.32 Y=441301.09 NAD - 1927
 TD - Lat: 32.2107992 Long: 103.6147410 X=722251.20 Y=441151.09 NAD - 1927

Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	0-1216'	11-3/4"	47	BT&C	J55	New	1.42	3.16	4.97
				Hole filled with 8.5-8.8# Mud			1514#	3072#	
10-5/8"	0-5000'	8-5/8"	32	BT&C	J-55	New	1.23	1.52	1.78
				Hole filled with 9.8-10.2# Mud			2533#	3928#	
7-7/8"	0-15785'	5-1/2"	17	BT&C	P-110	New	2.11	1.22	1.47
				Hole filled with 8.8-9.2# Mud			7480#	10640#	

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program:

- 11-3/4" Surface Circulate cement to surface w/ 520sx PPC cmt w/ 4% Bentonite + 1% CaCl₂ + .25#/sx Poly-E-Flake, 13.5ppg 1.73 yield 888# 24hr CS 125% Excess followed by 220sx PPC cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 1416# 24hr CS 125% Excess
- 8-5/8" Intermediate Circulate cement to surface w/ 950sx HES Light PPC cmt w/ 5% salt + .25% HR-800, 12.9ppg 1.85 yield 771# 24hr CS 125% Excess followed by 315sx PPC cmt, 14.8ppg 1.33 yield 1779# 24hr CS 125% Excess
- 5-1/2" Production Cement w/ 695sx Tuned Light cmt w/ 1#/sx Kol-Seal + .1#/sx Poly-E-Flake + .35% HR-601, 10.2ppg 3.055 yield 550# 24hr CS 100% Excess followed by 850sx Super H cmt w/ 3#/sx salt + .3% CFR-3 + .5% Halad-344 + .1% HR-800 + 2#/sx Kol-Seal, 13.2ppg 1.66 yield 900# 24hr CS 40% Excess. Calc TOC-4000'

Description of Cement Additives: Calcium Chloride, Salt (Accelerator); CFR-3 (Dispersant); Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Halad-344 (Low Fluid Loss Control); HR-601, HR-800 (Retarder)
 The above cement volumes could be revised pending the caliper measurement.

Proposed Mud Circulation System:

Depth	Mud Wt. ppg	Visc sec	Fluid Loss	Type System
0 - 1216'	8.5-8.8	28-38	NC	Fresh Water/Spud Mud
1216 - 5000'	9.8-10.2	28-32	NC	Fresh water/NaCl Brine
5000 - 15785'	8.8-9.2	28-34	NC	Cut Brine/Sweeps

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, water zones until such time as casing can be cemented into place for zonal isolation.

BOP Program:

Surface None
 Intermediate/Production 13-5/8" 10M three ram stack w/ 5M annular preventer, 5M Choke Manifold

Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	Depth	Type
a. Rustler	1191'	---
b. Base Anhydrite/Top Delaware	4982'	---
c. Bell Canyon	5006'	Form Water
d. Cherry Canyon	5984'	Oil/Gas
e. Brushy Canyon	7331'	Oil/Gas
f. Bone Spring	8954'	Oil/Gas
g. 1st Bone Spring	10007'	Oil/Gas
h. 2nd Bone Spring	10266'	Oil/Gas

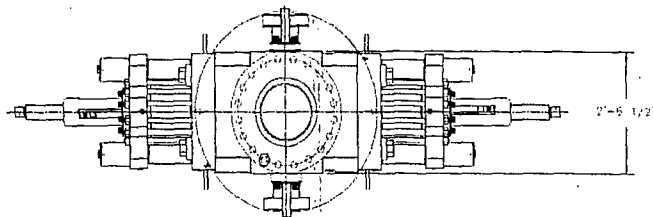
Fresh water may be present above the Rustler formation. Surface casing will be set below the top of the Rustler, which will cover potential fresh water sources.

A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins.
 Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

The wells listed below are either permitted, drilled or completed in the following pools and formations.

- Copperhead 18 St #3H - 30-025-41461 - Triple X Bone Spring, W.(96674) 2nd Bone Spring-TVD 11075' Ut C-F-K-N
- Copperhead 18 CN St #1H - 30-025-42345 - Triple X Bone Spring, W.(96674) 1st Bone Spring-TVD 9530' Ut C-F-K-N

FEB 18 2015



- LEGEND:
- ① - 4 1/16"-10M FLANGED END GATE VALVE
 - ② - 4 1/16"-10M FLANGED END GATE VALVE WITH DOUBLE ACTING HYDRAULIC ACTUATOR
 - ③ - 2 1/16"-10M FLANGED END GATE VALVE
 - ④ - 2 1/16"-10M FLANGED END CHOKER VALVE
 - ⑤ - 30-HOLE STUDDED ADAPTER

SHAFFER PATENT-COVER SPHERICAL ANNULAR PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), 10M BOTTOM FLANGE & 30 STUDDED TOP (WEIGHT = 14,300 LBS WITH SHAFFER API 16A HOT OIL RESISTANT ADAPTER (ELEVANT))

CAVERON LM DOUBLE RAM-TYPE PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), WITH 5" CAMERON PIPE RAMS (CAMRAM FRONT PACKERS & TOP SEALS) IN TOP CAVITY AND CAMERON DS SHEARING HIND RAMS IN BOTTOM CAVITY. BOTTOM FLANGE & STADDLED TOP (WEIGHT = 21,100 LBS. WITH RAMS)

13 5/8"-10M WP CAMERON (DRILLING) SPOOL (API 16A MONOGRAMMED), STUDDLED TOP & FLANGED BOTTOM, WITH 4 1/16"-10M WP FLANGED OUTLETS (WEIGHT APPROXIMATELY 6,000 LBS)

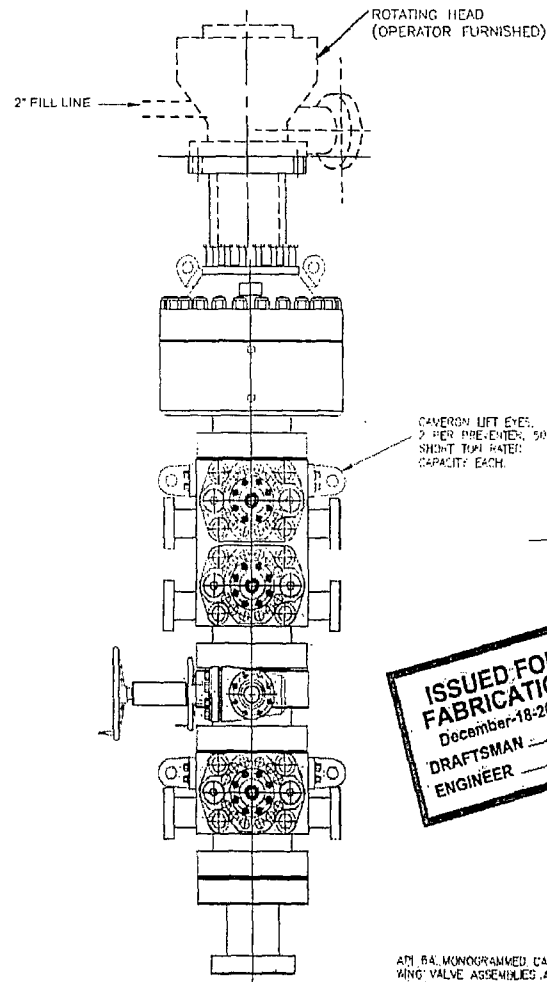
CAVERON LM SINGLE RAM-TYPE PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), WITH 5" CAMERON PIPE RAMS (CAMRAM FRONT PACKERS & TOP SEALS) BOTTOM FLANGE & STUDDLED TOP (WEIGHT = 10,900 LBS)

H&P FURNISHED
13 5/8"-10M x 13 5/8"-5M
ADAPTER SPOOL 2'-0" LONG

13 5/8 - 10M BOP STACK WITH 13 5/8 - 5M ANNULAR

PROPRIETARY

THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

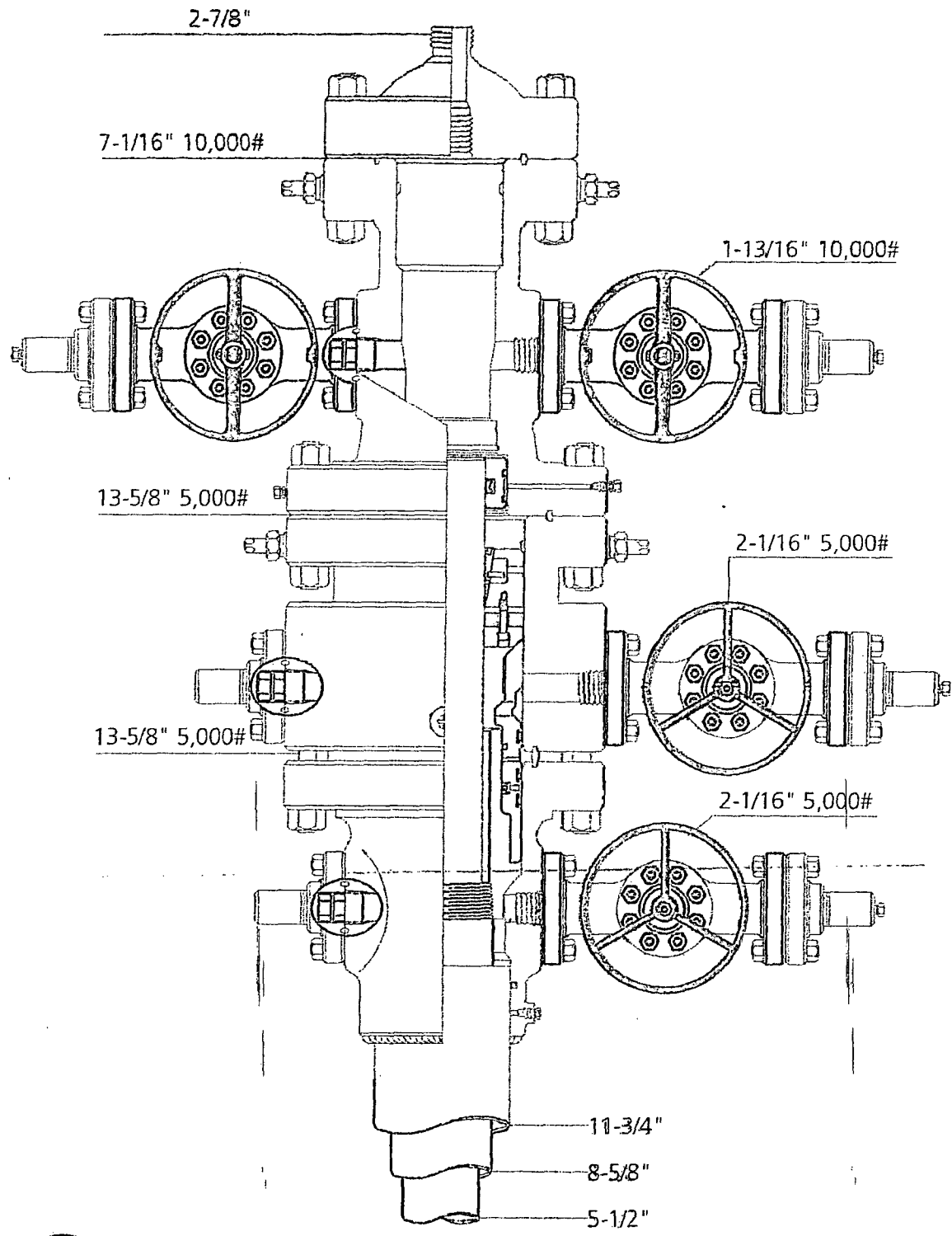


ISSUED FOR
FABRICATION
December-18-2007
DRAFTSMAN
ENGINEER

API 16A MONOGRAMMED CAMERON CHOKER AND KILL WING VALVE ASSEMBLIES ARE NOT SHOWN FOR CLARITY

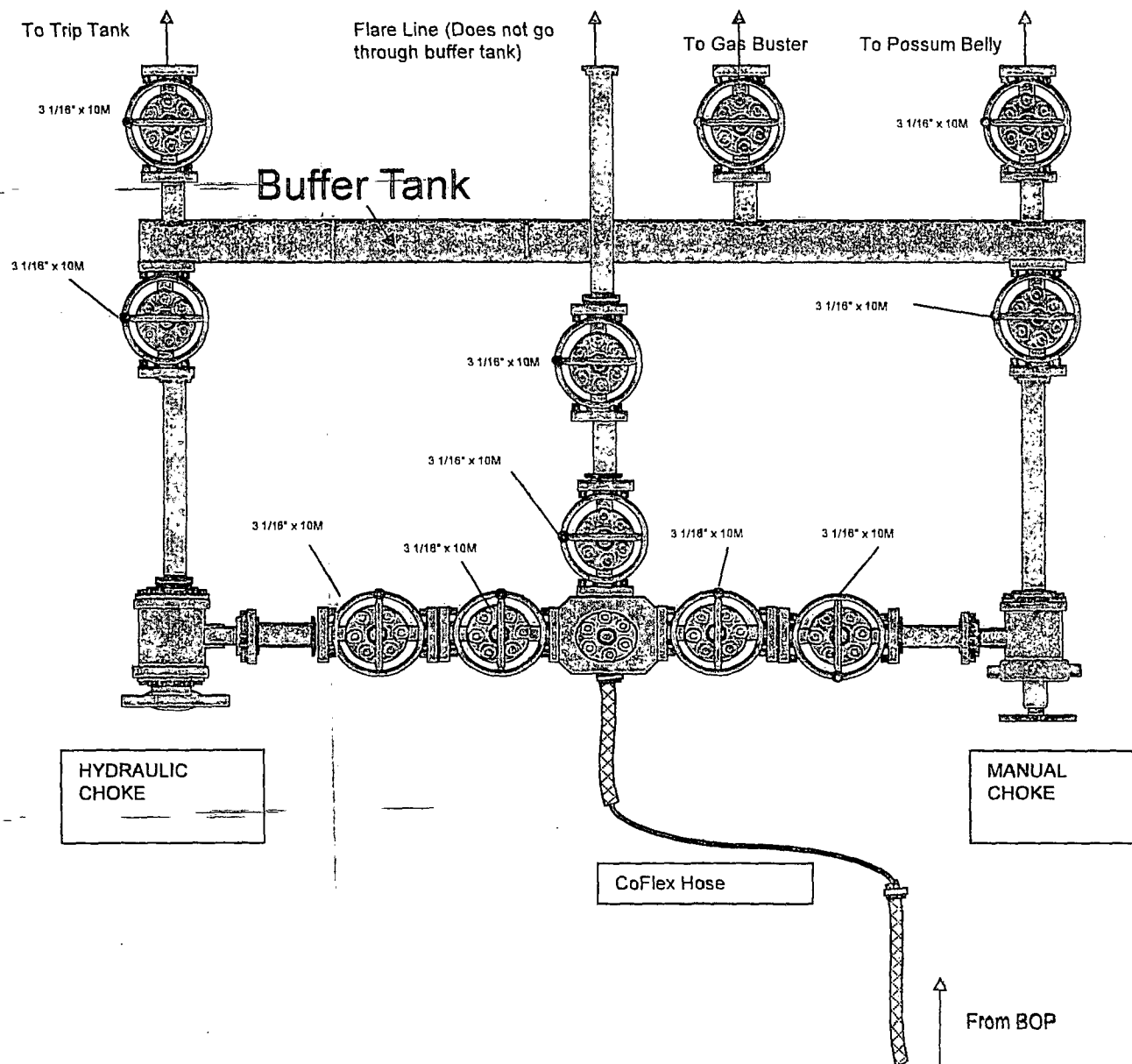
WEIGHTS DO NOT INCLUDE HOSES, ADAPTER SPOOLS OR QUICK CONNECT FITTINGS

ENGINEERING APPROVAL			DATE	TITLE:			
	12/18/07	ADDED SHEET 01	JAV	13 5/8"-10M BOP 3 RAM STACK FLEXRIG3			
	4-10-07	CAVERON RATES (RUE) SHEETS ADDED WINGS 1, 2, & 3 AND WS CHECK WING ADDED	JNG	CUSTOMER: H&P			
	4-04-07	ADDED TO "SPACER-ADAPTER SPOOL"	JNG	PROJECT: FLEXRIG3			
	07-07-07	ADDED ADAPTER SPOOL	WML	DRAWN: MTS			
	06-13-07	CORRECTED (BOP STACK)	WML	DATE: 06-05-07 CWR: NG...			
REV	DATE	DESCRIPTION	BY	SCALE	SHEET	OF	REV
				3/4" = 1'	1	1	210-P1-07 E



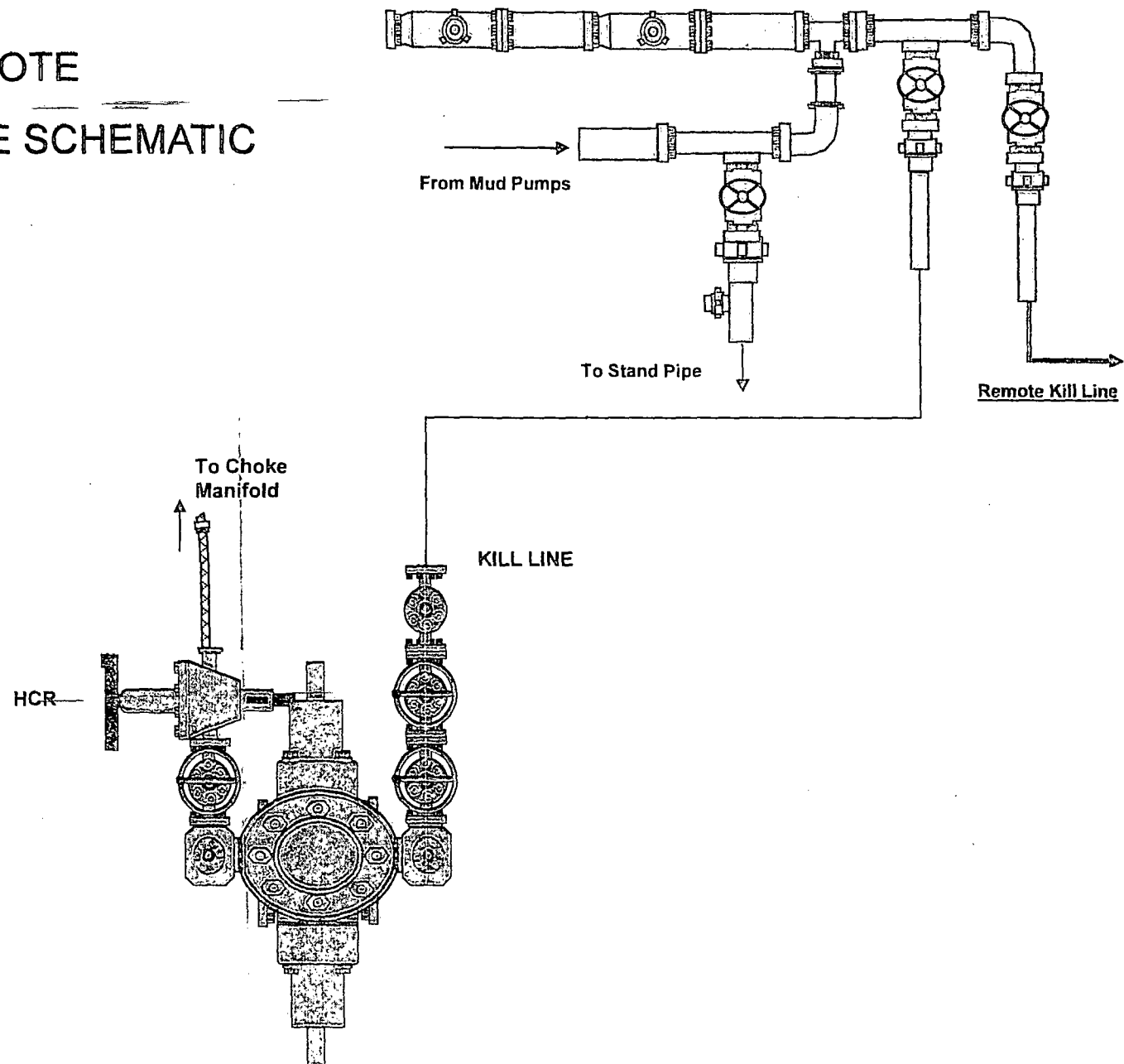
NAME: Jeanette	DATE: 1-31-13	DESIGN: #	21073221
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FLEX3 STD CHOKE MANIFOLD (COMPREHENSIVE)

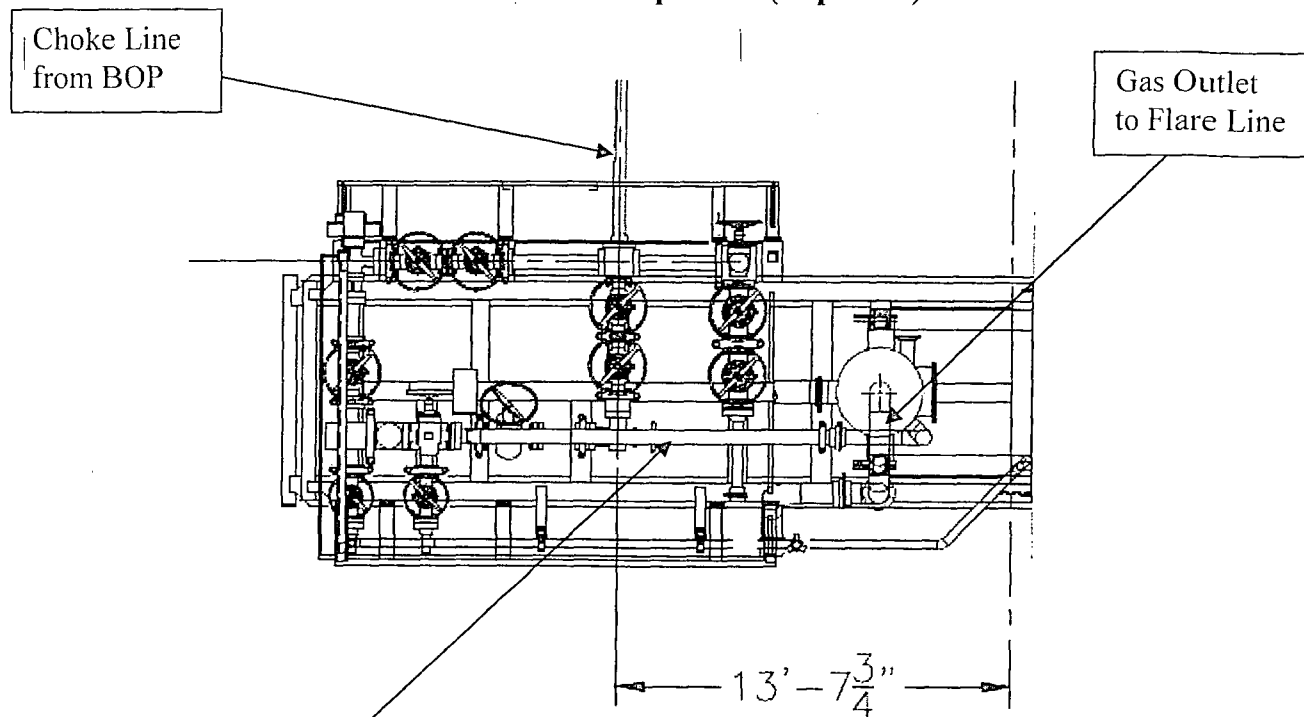


CM-1

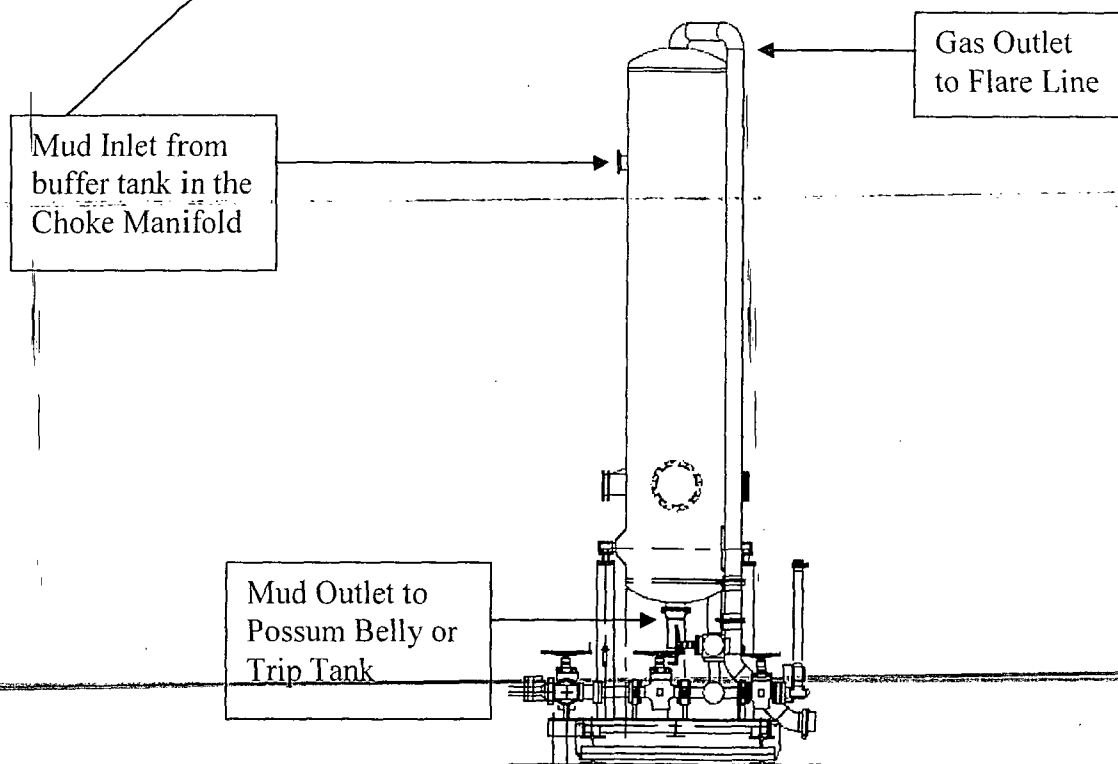
10M REMOTE KILL LINE SCHEMATIC



Choke Manifold – Gas Separator (Top View)

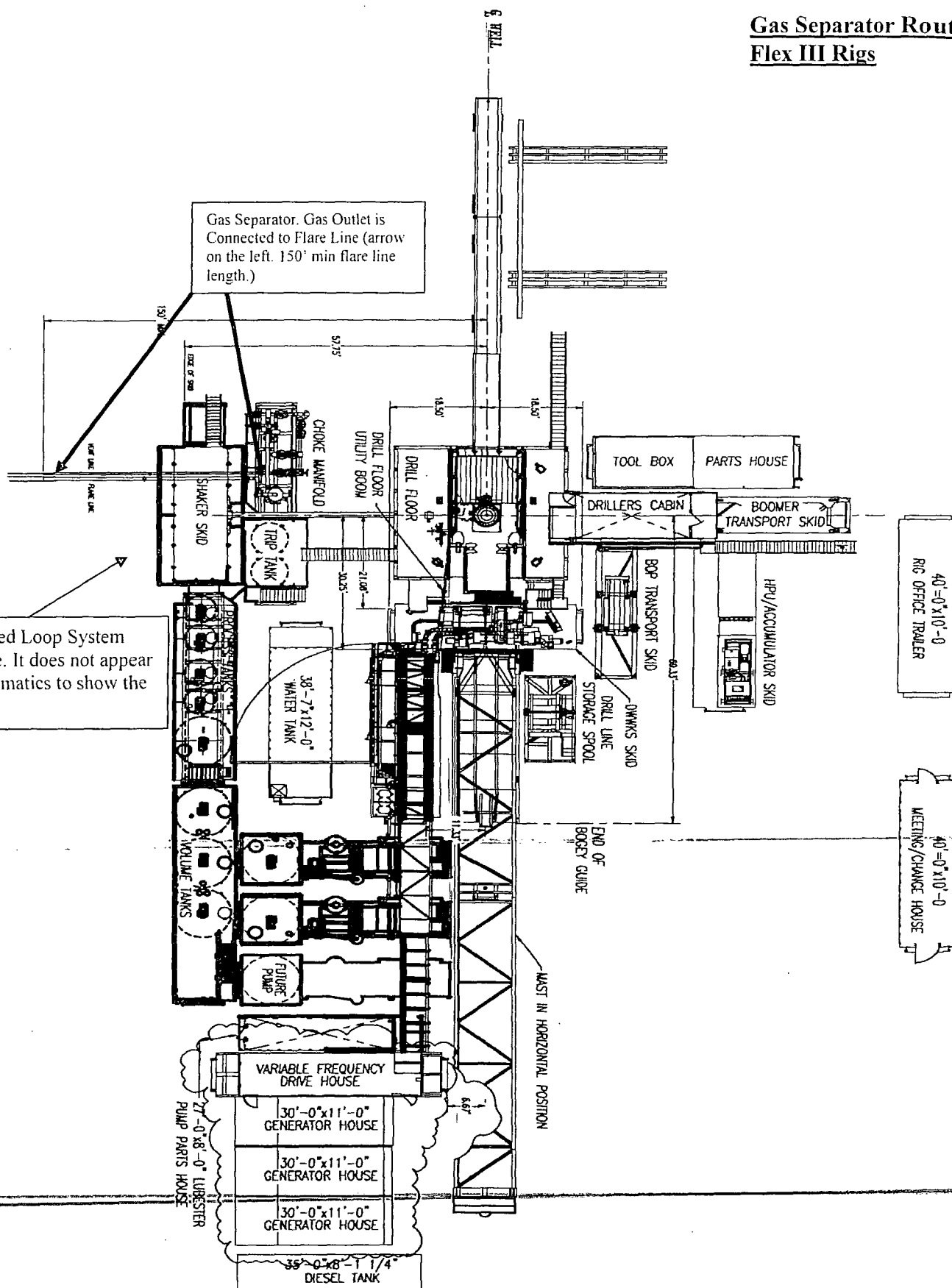


Choke Manifold – Gas Separator (Side View)



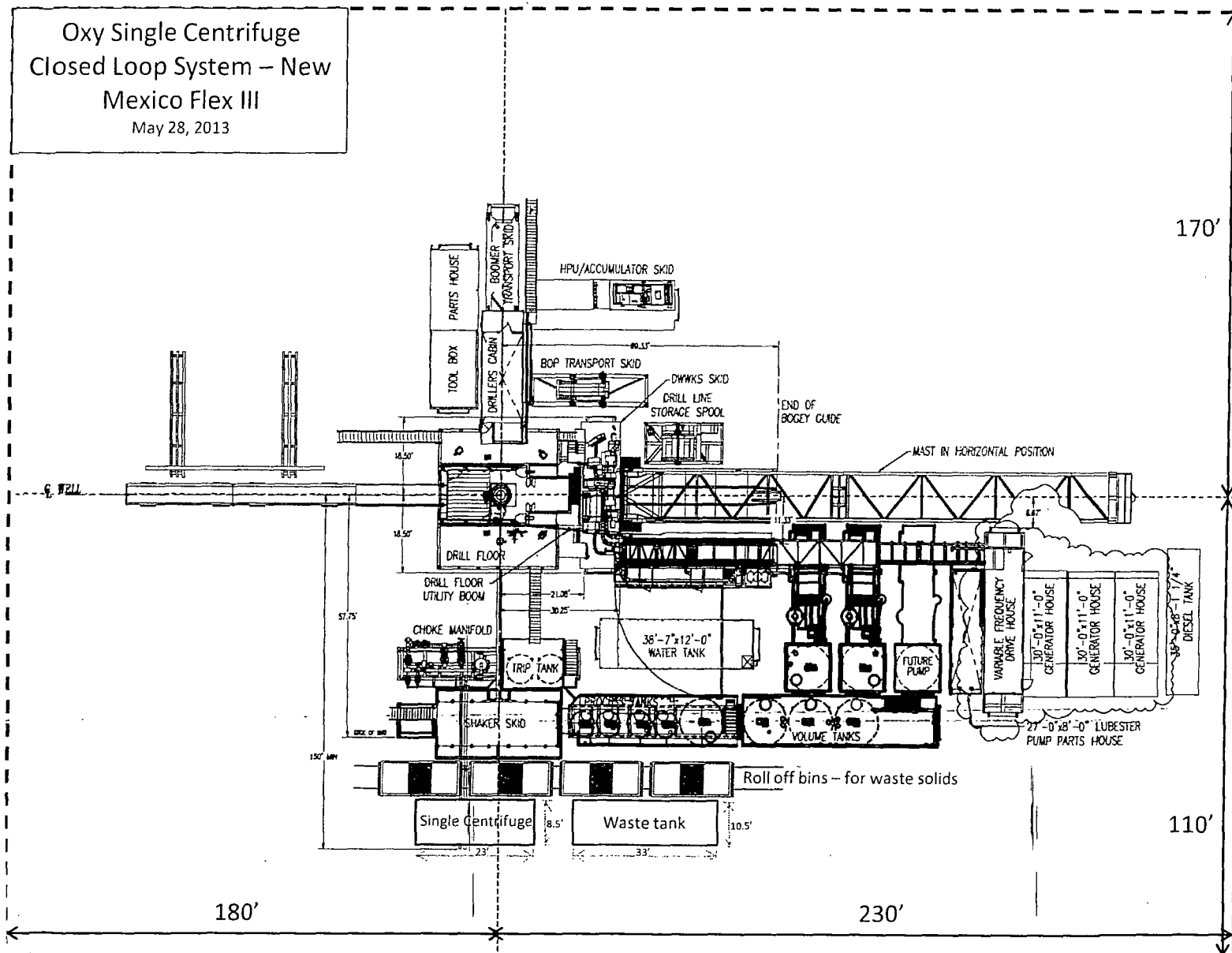
CM-4

Gas Separator Routing Flex III Rigs

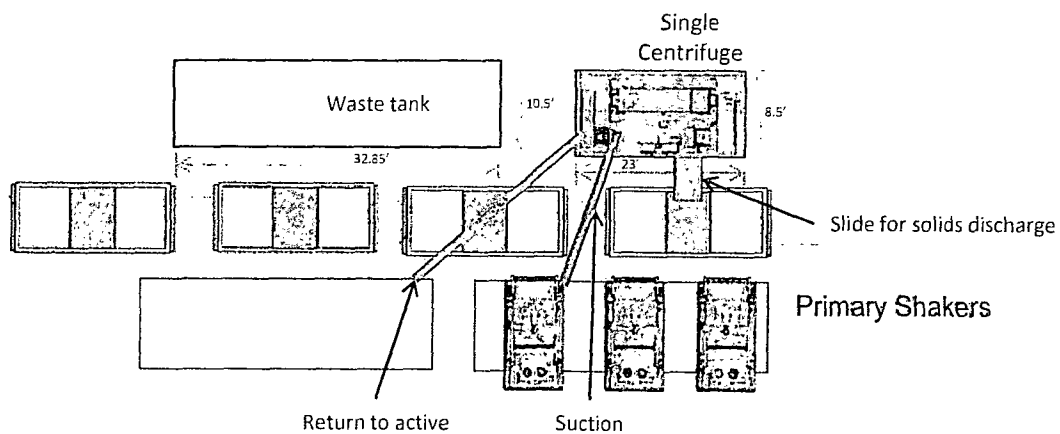


Oxy Single Centrifuge
Closed Loop System – New
Mexico Flex III

May 28, 2013



Oxy



Well Head



Oxy Single Centrifuge
Closed Loop System – New
Mexico Flex III
May 28, 2013