RECEIVED

OCT ARTESIA

NMOCD ARTESIA

Form 3160 -3 (March 2012) PCD ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED S	TATES			Expires	October 31, 20	. <del>"</del>	
DEPARTMENT OF BUREAU OF LAND	THE INTE			5. Lease Serial No. NM-46250A			JOS)
APPLICATION FOR PERMIT				6. If Indian, Alloted	e or Tribe Na	me	1/2/
la. Type of work: DRILL	REENTER			7. If Unit or CA Agreement, Name and No.			
lb. Type of Well: Oil Well Gas Well Othe	er	Single Zone Multip	ole Zone	8. Lease Name and PIGLET 21 FEDE		<u> </u>	54
2. Name of Operator OXY USA WTP LIMITED PART	NERSHIP	₹192463	7	9. API Well No.	5-40	154	18
3a. Address P.O. BOX 4294	3b. I	Phone No. (include area code)		10. Field and Pool, or	Exploratory		
HOUSTON, TX 77210	713	3-513-6640		ARTESIA; GLORI		) <sub>(O)</sub> <	-9/28
4. Location of Well (Report location clearly and in accordance	e with any State	requirements.*)		11. Sec., T. R. M. or Blk. and Survey or Area E; SEC 21, T17S, R28E			
At surface 1673' FNL & 990 FWL At proposed prod. zone				,,			
14. Distance in miles and direction from nearest town or post of 12 miles East of Artesia, N.M.	ffice*		<u> </u>	12. County or Parish EDDY	1	3. State	
15. Distance from proposed* 990' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 17. Spacing Unit dedicated to 40			g Unit dedicated to this	well		
18. Distance from proposed location* 422' to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 20. BLM/BIA Bond No. on file ES0136						
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22	Approximate date work will sta	rt*	23. Estimated durati	on		
3622'	1	/13/2013		10 DAYS			
	24	. Attachments					
The following, completed in accordance with the requirements	of Onshore Oil	and Gas Order No.1, must be a	ttached to the	is form:			
Well plat certified by a registered surveyor.     A Drilling Plan.		4. Bond to cover the Item 20 above).	he operation	ns unless covered by a	n existing bo	nd on fil	e (see
3. A Surface Use Plan (if the location is on National Forest SUPO must be filed with the appropriate Forest Service Off				ormation and/or plans a	as may be req	uired by	the
25. Signature MacAlacter		Name (Printed/Typed) JENNIFER DUARTE (je	nnifer_dua	arte@oxy.com)	Date 11/28/20	)12	
Title REGULATORY ANALYST							
Approved by (Signature) /s/George MacDone	ell	Name (Printed/Typed)			DateJAN	7	2013
Title FIELD MANAGER	-	Office : C	CARLSBA	AD FIELD OFFICE	Ē		
Application approval does not warrant or certify that the application	cant holds lega	al or equitable title to those righ	ts in the sub	ject lease which would	entitle the ap	plicant to	5
conduct operations thereon. Conditions of approval, if any, are attached.			APP	ROVAL FOR	TWO'	<u>/EAF</u>	₹S
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, mai States any false, fictitious or fraudulent statements or representa	ke it a crime t ations as to any	for any person knowingly and versities matter within its jurisdiction.	willfully to m	nake to any department	or agency of	the Uni	ited

(Continued on page 2)

\*(Instructions on page 2)

**Roswell Controlled Water Basin** 

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
RIT S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Sama Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

DAMENDED REPORT

201)(S	Number 4/9	40	. 4	- 1	Code	IND ACKE	400:0:	Pool Nam		(0)
39446		/4	1400		PIC	Property Nam SLET 21 FE		O IOI		ell Number
19241	63		Ó	хy	USA	Operator Nam WTP Limit	ed Partnershi	p	1	Blevation 3622'
						Surface Locat	ion			
UL or lot No.	Section 21	Township 17-S	Range 28-E	L	ot ldn	Feet from the 1673	North/South line NORTH	Feet from the 990	East/West line WEST	County EDDY
				Bott	om Hol	e Location If Diff	erent From Surface			
UL or lot No.	Section	Township	Range	L	ot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Agres	Joint or	Infill C	Consolidation C	ode	Ord	er No.		-		
NO ALLOWABLE WIL	IO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION									
990'	1673'			L S	NAD SURFAC Y=66 X=54 AT. = 32 DNG. = 10	COORDINATES 27 NME E LOCATION 2875.7 N 5415.8 E 2.822245' N 04.185494' W ETAIL 3613.2' 600' 3635.0'		I hereby ce complete to that this or, unleased in proposed he well at this of such mit pooling age heretofore  Printed No. 1 Printed No. 1 Printed No. 2 Pri	VEYOR CERTIF trify that the well location from field notes of actuar my supervision, and that to the hest of my belief. AUGUST 1, 2	nerein is true and e and belief, and orking interest or including the a right to drill this tract with an owner or to a voluntary booking order  ILATION shown on this plat I surveys made by the same is true
	· ·							Certifical DSS REI	Cary Cary Cary Cary Cary Cary Cary Cary	M27/20/2 LEIdson 12641 D. Eidson 3239 SC W.O.: 12.13.1988

United States Department of the Interior Bureau of Land Management Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220

RE:

Piglet 21 Fed #10

Section 21, 17S-28E

Eddy County, New Mexico

#### STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

**OPERATOR NAME:** 

**OXY USA WTP Limited Partnership** 

ADDRESS:

P.O. Box 4294

Houston, Texas 77210-4294

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

**LEASE NO.:** 

NMLC-046250-A

LEGAL DESCRIPTION:

SL: 1673' FNL & 893' FWL SWNW (E)

Section 21 T17S-R28E

Eddy County, New Mexico

**FORMATIONS:** 

Yeso

**BOND COVERAGE:** 

Nationwide

BLM BOND FILE NO.:

ES 0136

OXY USA WTP Limited Partnership

**AUTHORIZED SIGNATURE:** 

Colin D. Barnett

TITLE:

Landman

DATE:

May 15, 2012

### **OPERATOR CERTIFICATION**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filling of false statements. Executed this day of May, 2012.

Name:David Schellstede
Position:Reservoir Management Team Leader
Address:5 Greenway Plaza, Suite 110, Houston, TX 77046
Telephone:713-366-5013
E-mail: (optional):david_schellstede@oxy.com
E-mail: (optional):david_schellstede@oxy.com
Field Representative (if not above signatory):Dusty Weaver
Address (If different from above): _P.O. Box 50250 Midland, TX 79710
Telephone (if different from above):432-685-5723
E-mail (if different from above):calvin_weaver@oxy.com

## APD DATA - DRILLING PLAN -

**OPERATOR NAME / NUMBER: OXY USA WTP LP** 

LEASE NAME / NUMBER: Piglet 21 Federal 10

STATE: NM

**COUNTY: Eddy** 

**SURFACE LOCATION:** 

1673' FNL & 893' FWL, Sec 21, T17S, R28E

C-102 PLAT APPROX GR ELEV: 3622'

**EST KB ELEV**: 3636' (14' KB)

#### 1. GEOLOGIC NAME OF SURFACE FORMATION

a. Permian

# 2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS

Formation	TV Depth Top	Expected Fluids
Rustler	100	Fresh Water
Top of Salt	310	- '
Base of Salt	390	-
Yates	410	•
Seven Rivers	604	-
Queen	1170	-
Grayburg	1640	Oil
San Andres /	1749	Oil/Water
Glorietta	3350	Oil
Paddock	3440	Oil
Blinebry	3900	Oil
Tubb – Base of Yeso	4820	Oil
Drinkard	4965	-
TD	5300	TD.

A. Fresh Water formations will be covered with the 16" conductor pipe, which will be set at 120' prior to spud.

GREATEST PROJECTED TD 5300' MD / 5300' TVD

**OBJECTIVE**: Yeso

#### 3. CASING PROGRAM

Surface Casing: 9.625" casing set at  $\pm$  450' MD/ 450' TVD in a 12.25" hole filled with 8.4 ppg mud

Interval	Length	Wt	Gr	Condition	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 450'	450'	36	J-55	New	ST&C	2020	3520	394	8.921	8.765	13.33	1.97	27.91

Using offset well information and Oxy Yeso State wells as reference, we have found lost circulation at depths up to 350'. We would like to cover these zones by setting surface casing in the Yates before continuing. We also need to have surface casing at this depth in order to have sufficient kick tolerance to drill to TD.

Production Casing: 5.5" casing set at ± 5300'MD / 5300'TVD in a 7.875" hole filled with 9.2 ppg mud

						Coll	Burst						
1			ł	Condition		Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr		Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'- 5300'	5300'	17	. L-80	New	LT&C	6290	7740	338	4.892	4.767	2.48	3.86	4.37

Collapse and burst loads calculated using Stress Check with actual anticipated loads.

4. CEMENT PROGRAM:

See COA

Surface Interval

Interval	Amount sx	Ft of Fill		Туре	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
Surface (TOC:	: 0' - 450')					<u>-</u>		
Lead: 0' - 450' (150% Excess)	150	0'	94 lbm/s lbm/sk	Plus Cement: k Premium Plus Cement, 10 Cal-Seal 60, 0.125 lbm/sk Poly-E- lbm/sk Kol-Seal, 1 % Calcium - Flake	7.46	14.2	1.67	1290 psi
Tail: 0' - 450' (150% Excess)	250	450'	94 lbm/s	Plus Cement: k Premium Plus Cement, 2 % Chloride - Flake	6.39	14.8	1.35	2500 psi

**Production Interval** 

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
Production (T	OC: 0' - 530	00')					
Lead: 0' - 3000' (125 % Excess)	600	3000'	Halliburton Light Premium Plus: 5% Salt, 3 lbm/sk Kol-Seal, 0.125 lb/sx Poly_E Flake	9.95	12.9	1.89	530 psi
Tail: 3000' - 5300' (125 % Excess)	735	2300'	50/50 Poz Premium Plus: 3% Salt, 0.4% Halad ®-322, 0.125 lb/sx Poly E_Flake	5.64	14.5	1.24	980 psi

#### 5. PRESSURE CONTROL EQUIPMENT

**Surface: 0 – 450'** None.

**Production: 0 - 5300'** the minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required to drill below the surface casing shoe shall be 3000 (3M) psi (including annular).

- a. The 11" 3000 psi blowout prevention equipment will be installed and operational after setting the 9 5/8" surface casing and the 9 5/8" SOW x 11" 3K conventional wellhead;.
- **b.** The BOP and ancillary BOPE will be tested by a third party upon installation to the 9 5/8" 36# J-55 surface casing. All equipment will be tested to 250/3000 psi for 10 minutes except the annular, which will be tested to 70% of working pressure (2100 psi).
- c. The pipe rams will be functionally tested during each 24 hour period; the blind rams will be functionally tested on each trip out of the hole. These functional tests will be documented on the Daily Driller's Log. Other accessory equipment (BOPE) will include a safety valve and subs as needed to fit all drill strings, and a 2" kill line and 3 "choke line having a 3000 psi WP rating.
- d. See attached BOP & Choke manifold diagrams.
- e. Oxy requests a variance if Savanna 415 is used to drill this well to use a co-flex line between the BOP and choke manifold. See attached schematic.

Manufacturer: Hebei Ouya Ltd.

Serial Number: 1642343-04

Length: 39" Size: 3"

WP rating: 3000 psi

Ends: flanges

Anchors required by manufacturer: No

#### 6. MUD PROGRAM:

Depth	Mud Wt ppg	Vis Sec	Fluid Loss	Type System
0 – 450'	9.6 – 10.0	27 – 30	NC	Fresh Water
450' – TD	9.2 – 9.4	27 – 40	10 -20	Brine Water / Salt Gel

Remarks: 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.

A. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

### 7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

- a. A Kelly cock will be in the drill string at all times.
- **b.** A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.

8. LOGGING / CORING AND TESTING PROGRAM:

A. Mud Logger: None.

B. DST's: None.

C. Open Hole Logs as follows: Triple combo for production section.

#### 9. POTENTIAL HAZARDS:

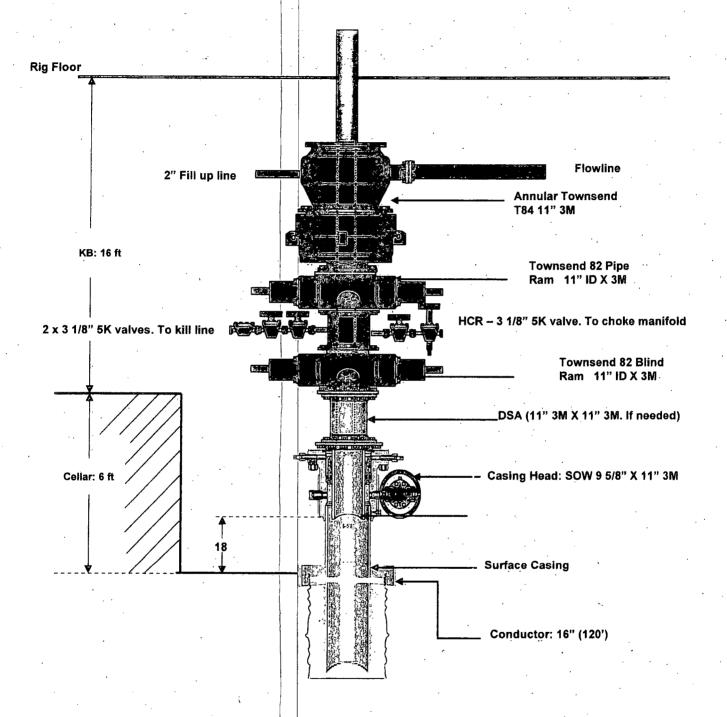
- A. H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6.
- B. The bottomhole pressure is anticipated to be 2536 psi.
- C. No abnormal temperatures or pressures are anticipated. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

#### 10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 15 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

#### 11. COMPANY PERSONNEL:

Name	Title	Office Phone
Carlos Mercado	Drilling Engineer	713-366-5418
Luis Tarazona	Drilling Engineer Supervisor	713-366-5771
Roger Allen	Drilling Superintendent	713-215-7617
Douglas Chester	Drilling Manager	713-366-5194

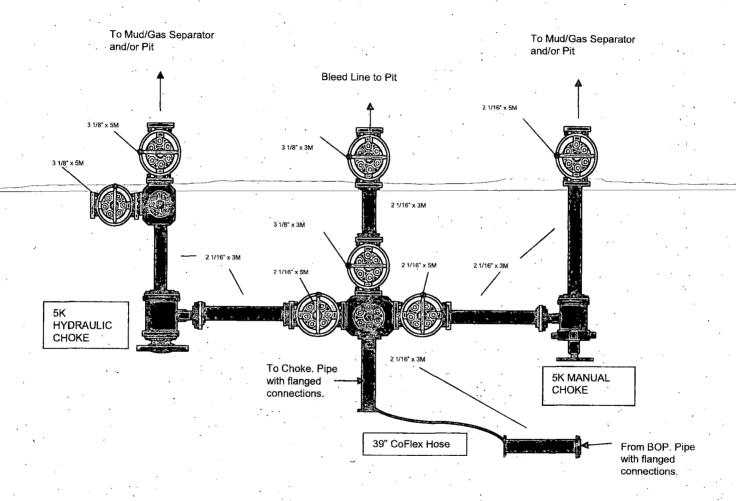


# 3-1/8" x 2-1/16" 3000# NACE TRIM SINGLE GUT CHOKE & KILL MANIFOLD SYSTEM August-06

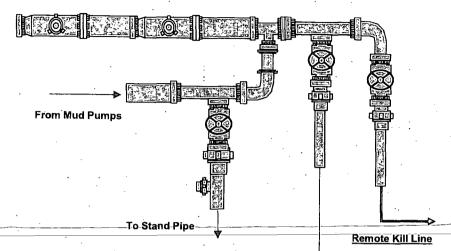
ITEM	I.D. NO.	DESCRIPTION
1	9053	2-1/16" 5000# BLIND FLANGE
2	AR0605004	2-1/16" 5000# STUDDED CROSS
3	AS0606009	2-1/16" 5000# CNV NACE TRIM GATE VALVE
4	9053	2-1/16" 5000# x 2" L.P. COMPANION FLANGE
5	Q7082	2-1/16" 3000# x 8.562" O.A.L. FLANGED SPACER SPOOL
6	AS0606003	2-1/16" 5000# CNV NACE TRIM GATE VALVE
7	A0445	3-1/8" x 3-1/8" x 2-1/16" x 2-1/16" 3000# STUDDED CROSS
8	AS0606119	3-1/8" 3000# CNV NACE TRIM GATE VALVE
9	F3323	3-1/8" 3000# x 3" L.P. COMPANION FLANGE
10	AS0606004	2-1/16" 5000# CNV NACE TRIM GATE VALVE
11	Q7082	2-1/16" 3000# x 3.312" O.A.L. SOLID SPACER SPOOL
12	AR0605007	2-1/16" 5000# STUDDED CROSS
.13	AS0606005	2-1/16" 5000# CNV NACE TRIM GATE VALVE
14	9053	2-1/16" 5000# x 2" L.P. COMPANION FLANGE
15	9053	2-1/16" 5000# BLIND FLANGE
16	AS0606007	2-1/16" 5000# CNV NACE TRIM GATE VALVE
17_	Q7082	2-1/16" 3000# x 7" O.A.L. DOUBLE STUDDED SPACER SPOOL
18	1091200-1-1130	2-1/16" 5000# CORTEC "CM-2" ADJUSTABLE CHOKE c/w 2 x 0.75" CERAMIC DISCS
19	AS0606006	2-1/16" 5000# CNV NACE TRIM GATE VALVE
20	A0441	3-1/8" x 3-1/8" x 2-1/16" x 2-1/16" x 2-1/16" 3000# 5- WAY STUDDED BLOCK
21	AS0606118	3-1/8" 3000# CNV NACE TRIM GATE VALVE
22	51209	3-1/8" 3000# x 10.5" O.A.L. FLANGED SPACER SPOOL
23	AS0606001	2-1/16" 5000# CNV NACE TRIM GATE VALVE
24	Q7082	2-1/16" 3000# x 4 733" O.A.L. SOLID SPACER SPOOL
25	1091200-1-1137	2-1/16" 5000# CORTEC "CM-2" ADJUSTABLE CHOKE c/w 2 x 0.75" CERAMIC DISCS
26	Q7082	2-1/16" 3000# x 7" O.A.L. DOUBLE STUDDED SPACER SPOOL
27	AS0606008	2-1/16" 5000# CNV NACE TRIM GATE VALVE
28	AS0606002	2-1/16" 5000# CNV NACE TRIM GATE VALVE
- 29	, 9053	2-1/16" 5000# x 2" L.P. COMPANION FLANGE

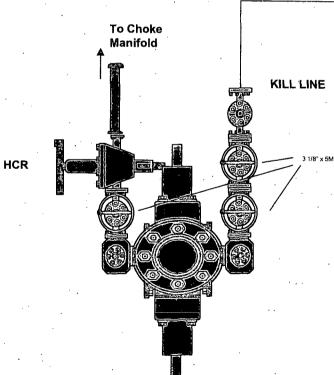


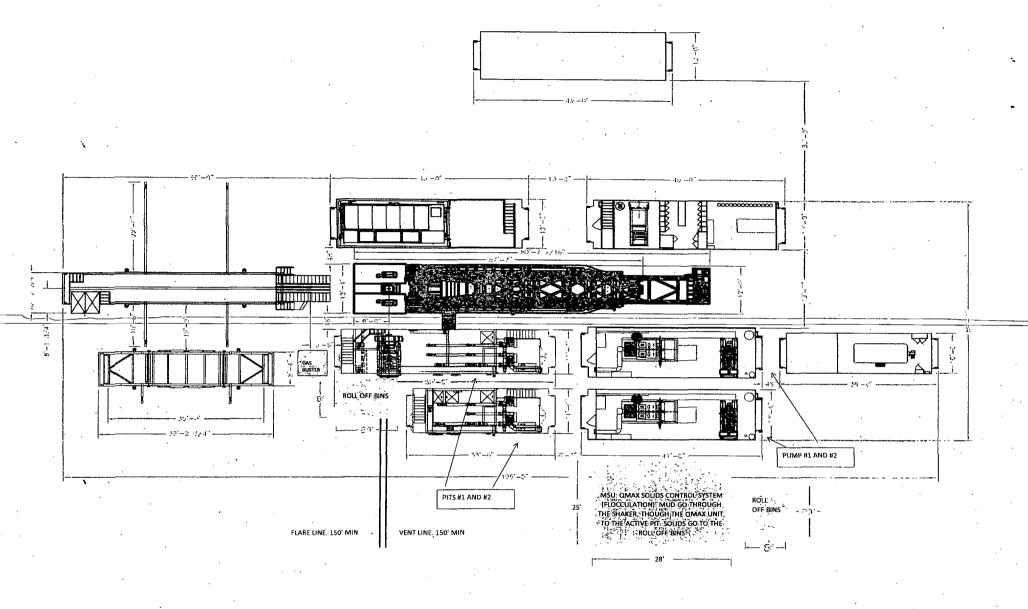
# 3M CHOKE MANIFOLD CONFIGURATION



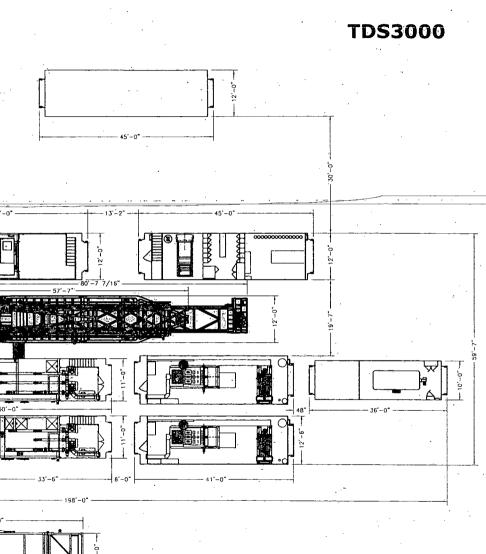
# 3M REMOTE KILL LINE SCHEMATIC

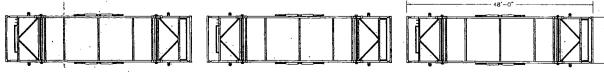






Savanna Drilling





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9727 47th Ave Edmonton, AB T6E 5M7 780-437-2630

# Certificate of Compliance

Date: 2011-12-01

REDL-SLIM-48x39IN-FIG1502 Item Desc:

Asset #: 1642343-04

Chip ID: NOCHIPID

Commercial Solutions INC (103867)

Tested by: Dave Penner

Initial Location:

Site\2714 5 ST

Witnessed by: Ben Ahlskog

Item Attributes: Senal Number

1642343-04 Manufacturer HEBEI OUYA LTD.

Application Group SLIMHOLE

Model REDL-SLIMHOLE-3000-48

Date of Mfr

Date Installed 2011-12-01

Locn Desc

Inside Dia. 3 IN 39 IN Length

Working Pressure 3000 PSI 4500 PSI Test Pressure

Coupling A 948HX+48B/FIG1502-HU-48

Attach Method A Swaged

GEORGE MYER/KEMPER REBUILT Coupling A Model

Coupling B 948HX+48B/FIG1502-HU-48

Attach Method B Swaged

Coupling B Model GEORGE MYER/KEMPER REBUILT

Distributor Ref # 1642343-04

Factory Ref# EndUser Ref #

Notes

BUILT ON PO: JON

Default Hose Certification Test Notes

Hose passed all visual and physical inspections.

**PASS** 

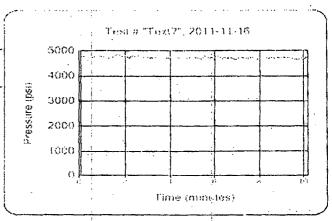
N/A

Continuity Test Results Continuity Ohm Reading

Certification Result Generate Alert?

Comments

**TimeStamp** 2011-12-01 12:54:14 -07:00



## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA Inc
LEASE NO.:	
WELL NAME & NO.:	10 Piglet 21 Federal
SURFACE HOLE FOOTAGE:	1673' FNL & 893' FWL
BOTTOM HOLE FOOTAGE	'FL & 'FL
LOCATION:	Section 21, T.17 S., R.28 E., NMPM
COUNTY:	Eddy County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

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