

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No NM-048343
1b Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name TCS 9/12/2012
2 Name of Operator OXY USA WTP LIMITED PARTNERSHIP		7 If Unit or CA Agreement, Name and No.
3a Address P O BOX 4294 HOUSTON, TX 77210	3b Phone No (include area code) 713-513-6640	8 Lease Name and Well No. PIGLET 21 FEDERAL #8 <39440>
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface 727' FNL & 462' FVL At proposed prod zone		9 API Well No. 30-015-40669
14 Distance in miles and direction from nearest town or post office: 12 miles East of Artesia, N.M.		10 Field and Pool, or Exploratory ARTESIA; GLORIETA-YESO (O) <96830>
15 Distance from proposed location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 462'	16 No of acres in lease 120	11 Sec, T R M or Blk and Survey or Area D, SEC 21, T17S, R28E
18 Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft 771'	19 Proposed Depth 5300' MD/TVD	12 County or Parish EDDY
21 Elevations (Show whether DF, KDB, RT, GL, etc) 3597'	22 Approximate date work will start 08/17/2012	13 State NM
17 Spacing Unit dedicated to this well 40		
20 BLM/BIA Bond No on file ES 0136		
23 Estimated duration 10 DAYS		

24 Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form

- | | |
|--|---|
| 1 Well plat certified by a registered surveyor | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan. | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM. |

25 Signature 	Name (Printed/Typed) Jennifer Duarte (jennifer_duarte@oxy.com)	Date 05/21/2012
Title Regulatory Analyst		

Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed) SEP - 6 2012
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon
Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Continued on page 2)

*(Instructions on page 2)

NMOCA: Must be in compliance
w/Rule 5.9 before placing well
on production


SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Roswell Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

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 filing of false statements. Executed this 21st 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
Company: OXY USA WTP Limited Partnership
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

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

DISTRICT II
811 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., Santa 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40669	Pool Code 96830	Pool Name Artesia; Glorieta-Yeso (O)
Property Code 39440	Property Name PIGLET 21 FEDERAL	Well Number 8
OGRID No. 192463	Operator Name OXY USA WTP Limited Partnership	Elevation 3597'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	21	17-S	28-E		727	NORTH	462	WEST	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 40	Joint or Infill	Consolidation Code	Order No. 9/6 5300
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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

	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>SURFACE LOCATION Y=663812.8 N X=544887.8 E</p> <p>LAT.=32.824823° N LONG.=104.187208° W</p>	<p>DETAIL</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: Date: 7/3/12</p> <p>Printed Name: Jennifer Duarte</p> <p>E-mail Address: jennifer_duarte@oxy.com</p>
	<p>OPERATOR: Please do not report production under this pool id code until OCD confirms perfs and appropriate pool designation on completion and C104 approvals.</p>		<p>SURVEYOR CERTIFICATION</p> <p>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 supervision, and that the same is true and correct to the best of my belief</p> <p>APRIL 4, 2012</p> <p>Date of Survey</p> <p>Signature & Seal of Professional Surveyor:</p> <p> Certification Number: 3239 Gary J. Eidson 12641 Ronald J. Eidson 3239 DSS PROFESSIONAL SURVEYOR W.O.: 12 11 0087</p>

APD DATA – DRILLING PLAN –

OPERATOR NAME / NUMBER: OXY USA WTP LP

LEASE NAME / NUMBER: Piglet 21 Federal 8

STATE: NM **COUNTY:** Eddy

SURFACE LOCATION: 727' FNL & 462' FWL, Sec 21, T17S, R28E

C-102 PLAT APPROX GR ELEV: 3597'

EST KB ELEV: 3611' (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
Blinberry	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 ± 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

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'- 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	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Surface (TOC: 0' – 450')							
Lead: 0' – 450' (150% Excess)	150	0'	Premium Plus Cement: 94 lbm/sk Premium Plus Cement, 10 lbm/sk Cal-Seal 60, 0.125 lbm/sk Poly-E- Flake, 10 lbm/sk Kol-Seal, 1 % Calcium Chloride - Flake	7.46	14.2	1.67	1290 psi
Tail: 0' – 450' (150% Excess)	250	450'	Premium Plus Cement: 94 lbm/sk Premium Plus Cement, 2 % Calcium Chloride - Flake	6.39	14.8	1.35	2500 psi

Production Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Production (TOC: 0' - 5300')							
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).

- 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;
- 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).
- 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.
- See attached BOP & Choke manifold diagrams.
- 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"

Ends: flanges

WP rating: 3000 psi

Anchors required by manufacturer: No

*See
COA **

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.

X See COA

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.

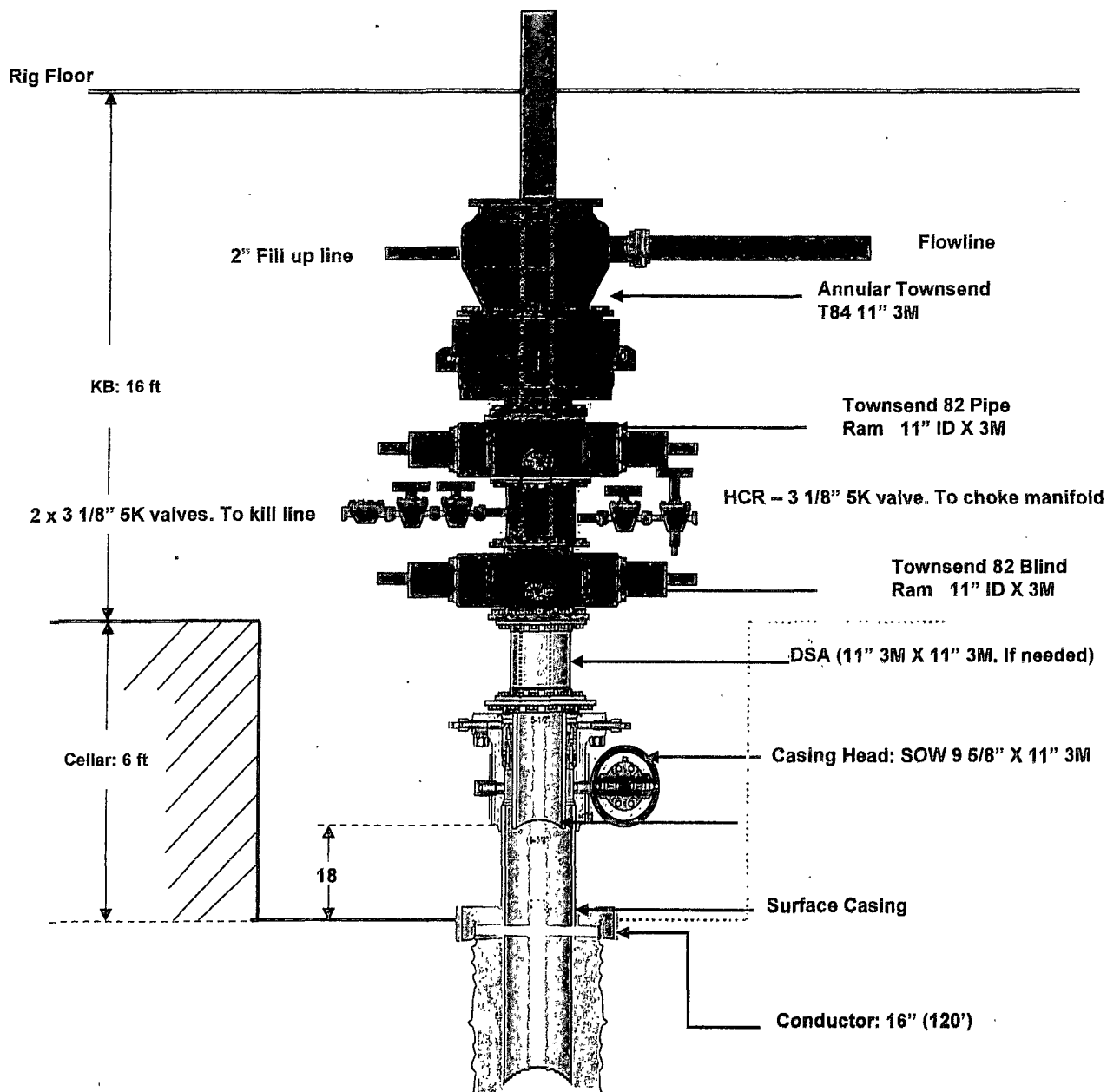
10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS

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

BOP Diagram



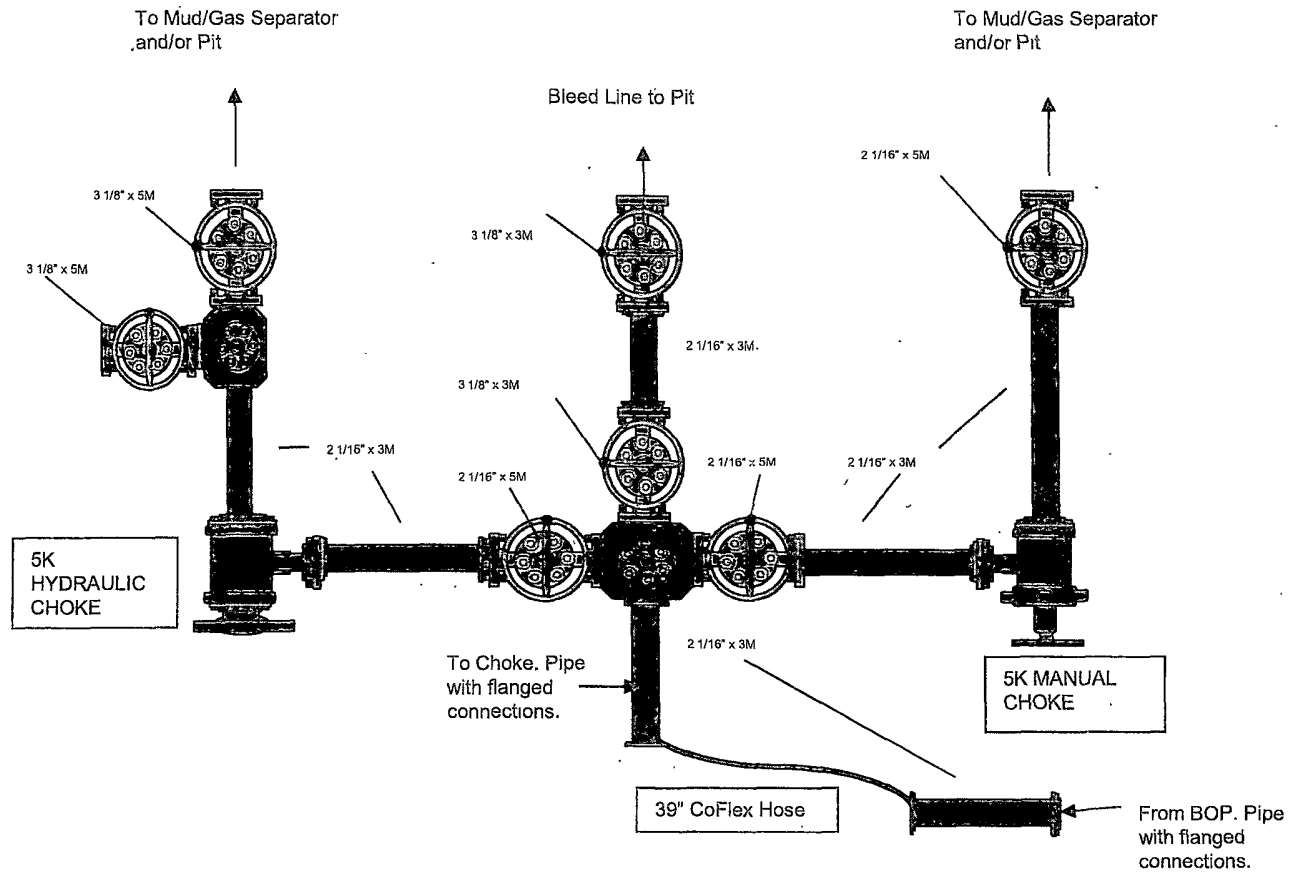
3-1/8" x 2-1/16" 3000# NACE TRIM SINGLE GUT CHOKE & KILL MANIFOLD SYSTEM

August-06

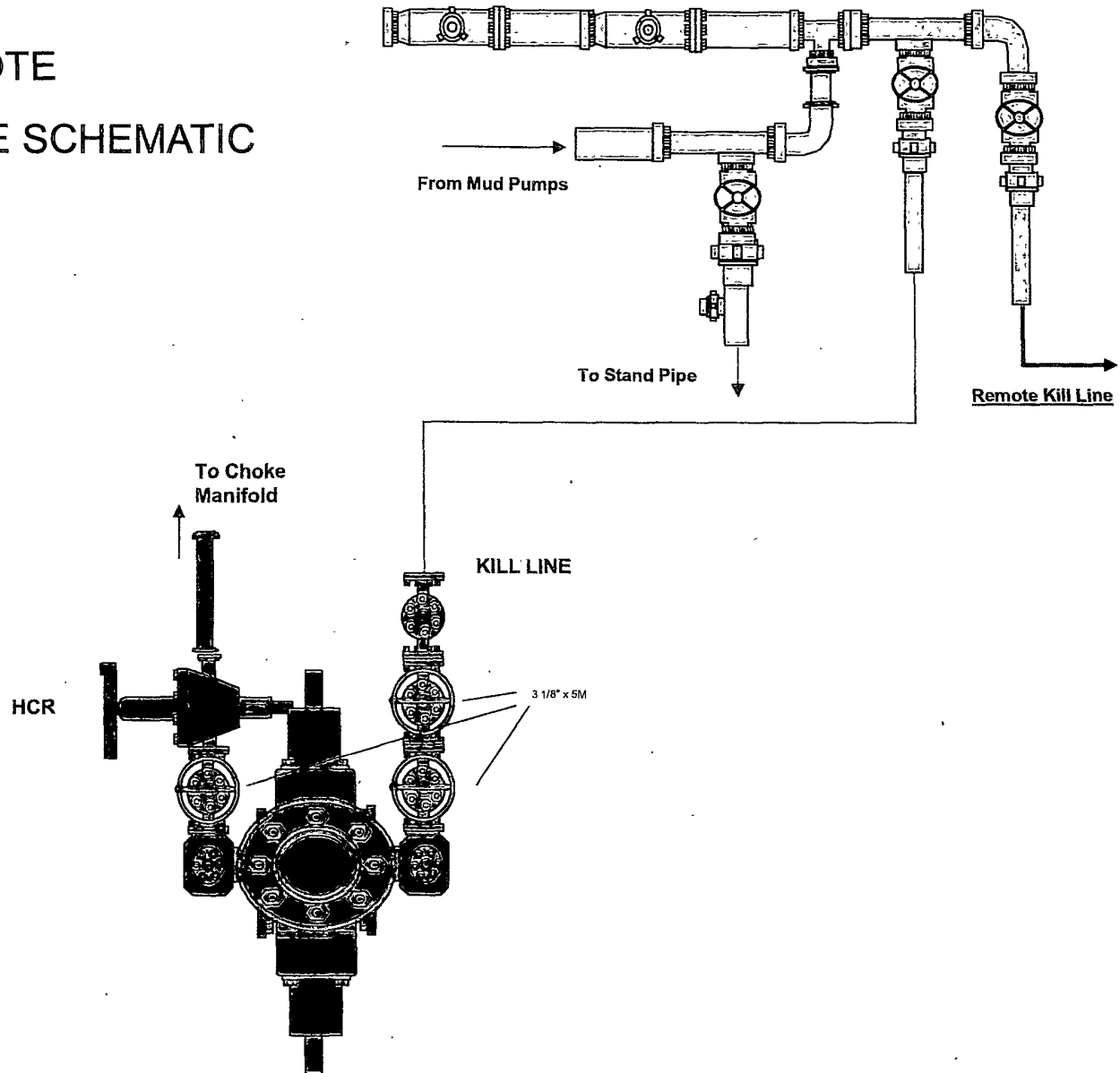
ITEM	I.D. NO.	DESCRIPTION
1	9053	2-1/16" 5000# BLIND FLANGE
2	AR0605004	2-1/16" 5000# STUDDER CROSS
3	AS0606009	2-1/16" 5000# CNV NACE TRIM GATE VALVE
4	9053	2-1/16" 5000# x 2" L.P. COMPANION FLANGE
5	Q7082	2-1/16" 3000# x 8.562" O.A.L. FLANGED SPACER SPOOL
6	AS0606003	2-1/16" 5000# CNV NACE TRIM GATE VALVE
7	A0445	3-1/8" x 3-1/8" x 2-1/16" x 2-1/16" 3000# STUDDER 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# STUDDER 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 STUDDER 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 STUDDER 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 STUDDER 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

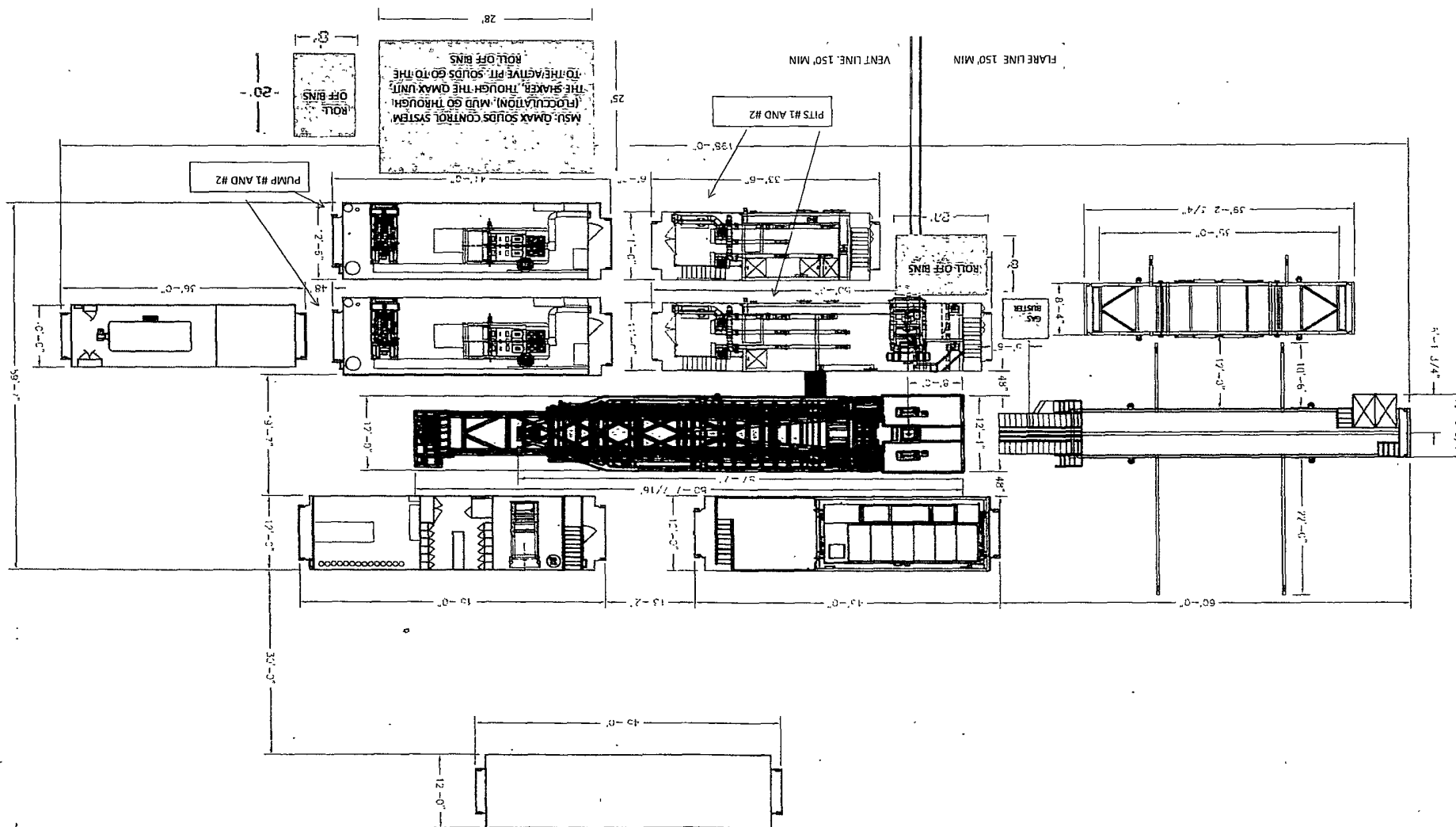
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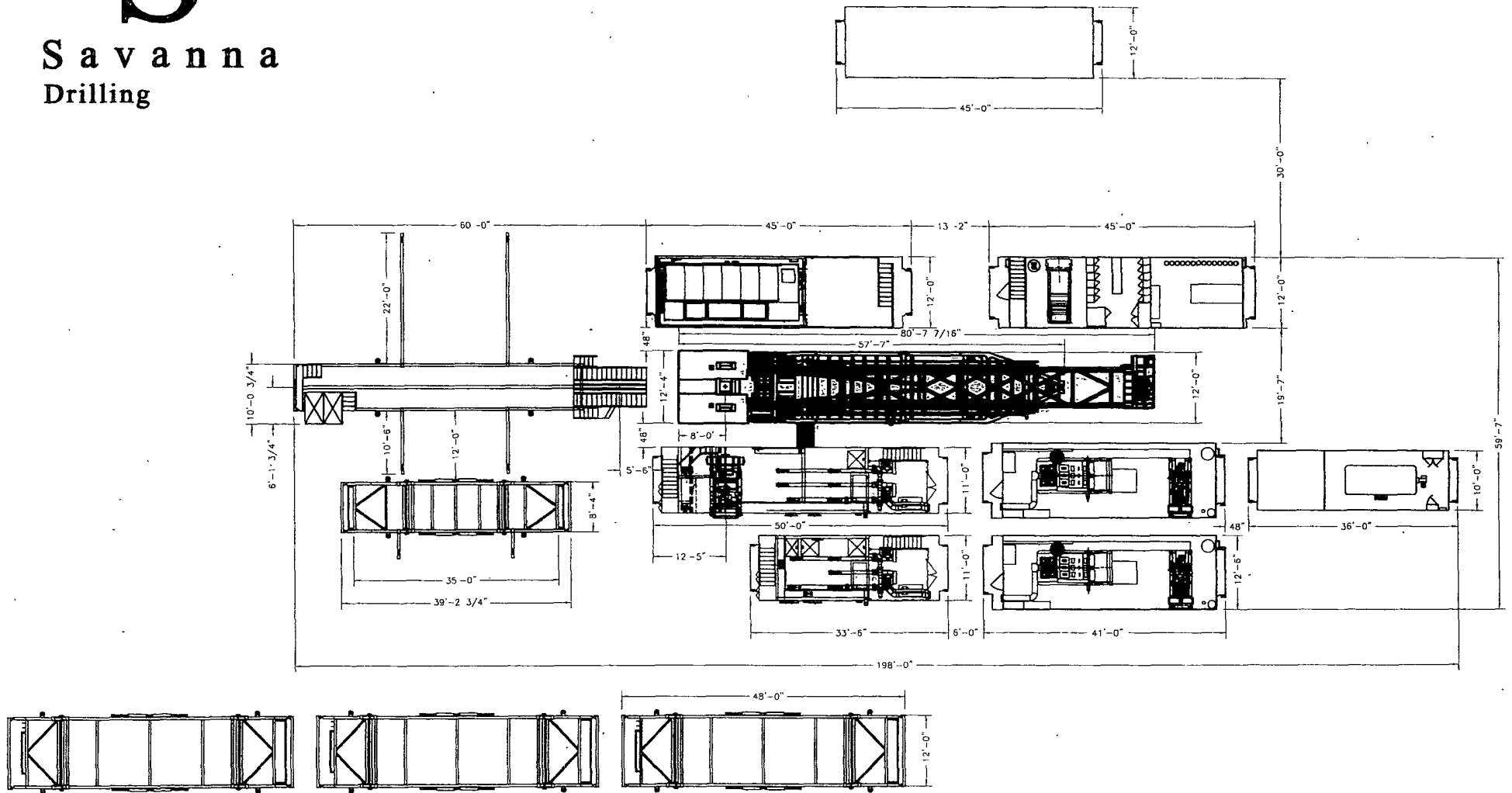
3M CHOKE MANIFOLD CONFIGURATION



3M REMOTE KILL LINE SCHEMATIC







MANIFOLD



HEBEI OUYA LTD. THE HOSE PEOPLE INC

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

Certificate of Compliance

Date: 2011-12-01
Item Desc: REDL-SLIM-48x39IN-FIG1502
Asset #: 1642343-04
Chip ID: NOCHIPID
Owner: Commercial Solutions INC (103867)

Test#: _____
Initial Location:
Site\2714 5 ST

Tested by: Dave Penner

Witnessed by: Ben Ahlskog

Item Attributes:

Serial 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
Length	39 IN
Working Pressure	3000 PSI
Test Pressure	4500 PSI
Coupling A	948HX+48B/FIG1502-HU-48
Attach Method A	Swaged
Coupling A Model	GEORGE MYER/KEMPER REBUILT
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

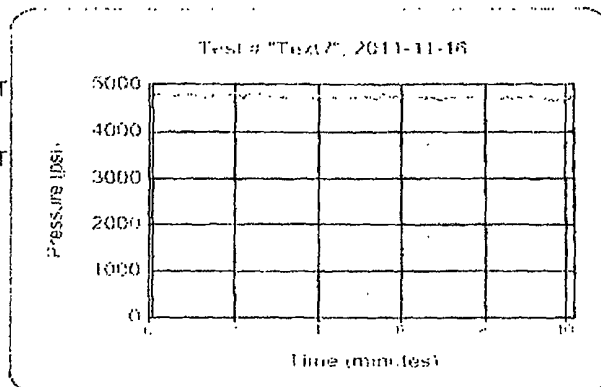
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Continuity Ohm Reading
Certification Result
Generate Alert?
Comments
TimeStamp

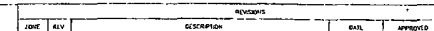
Hose passed all visual and physical inspections.

N/A

PASS

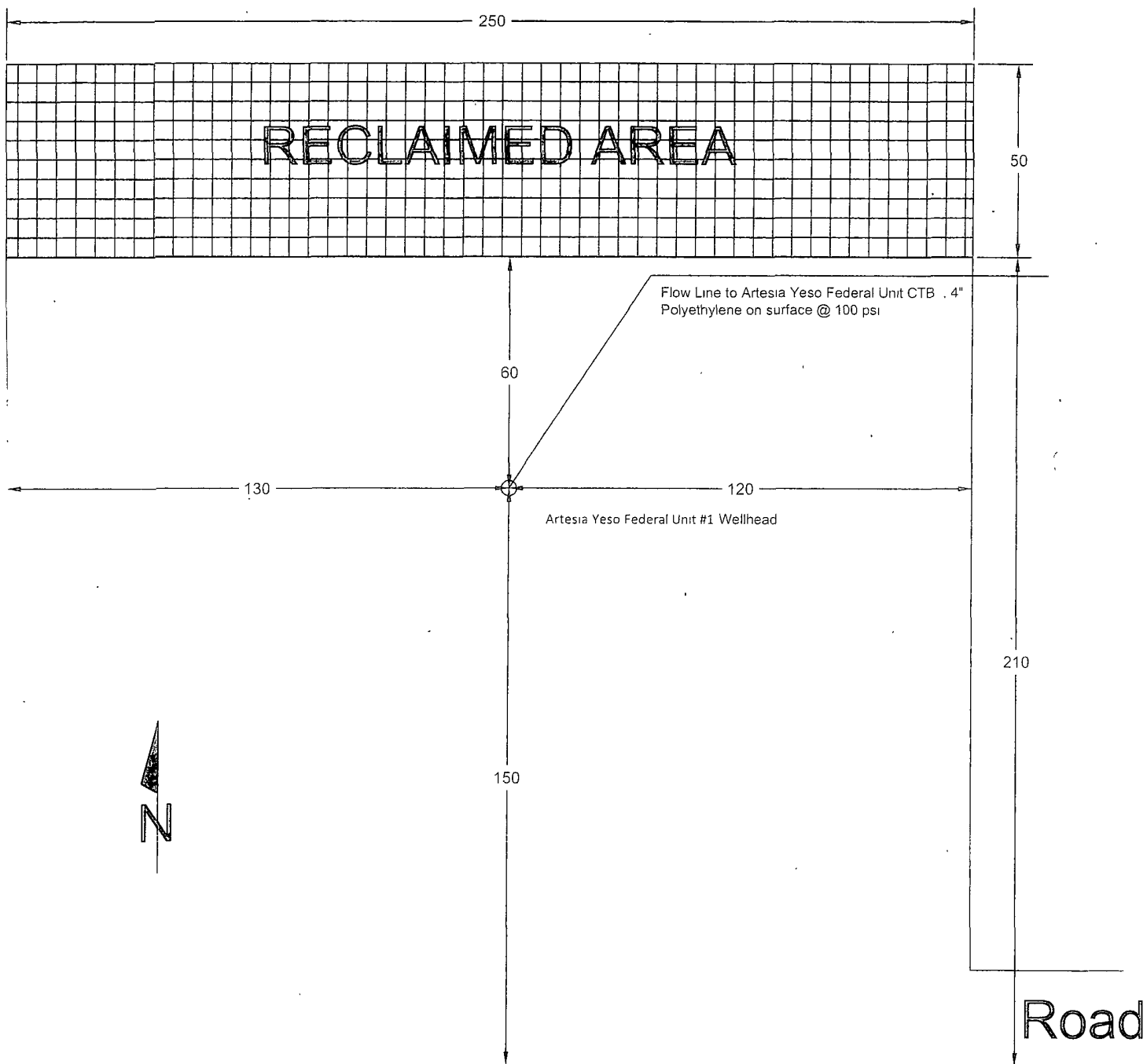
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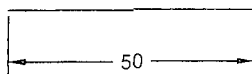
DATE	PLST DATE	DWG NO	REV
D	10-12-2011	NALP-029--DWG--001	-
SCALE	NTS	DRAWN BY T ANDERSON	SHEET 1 OF 1

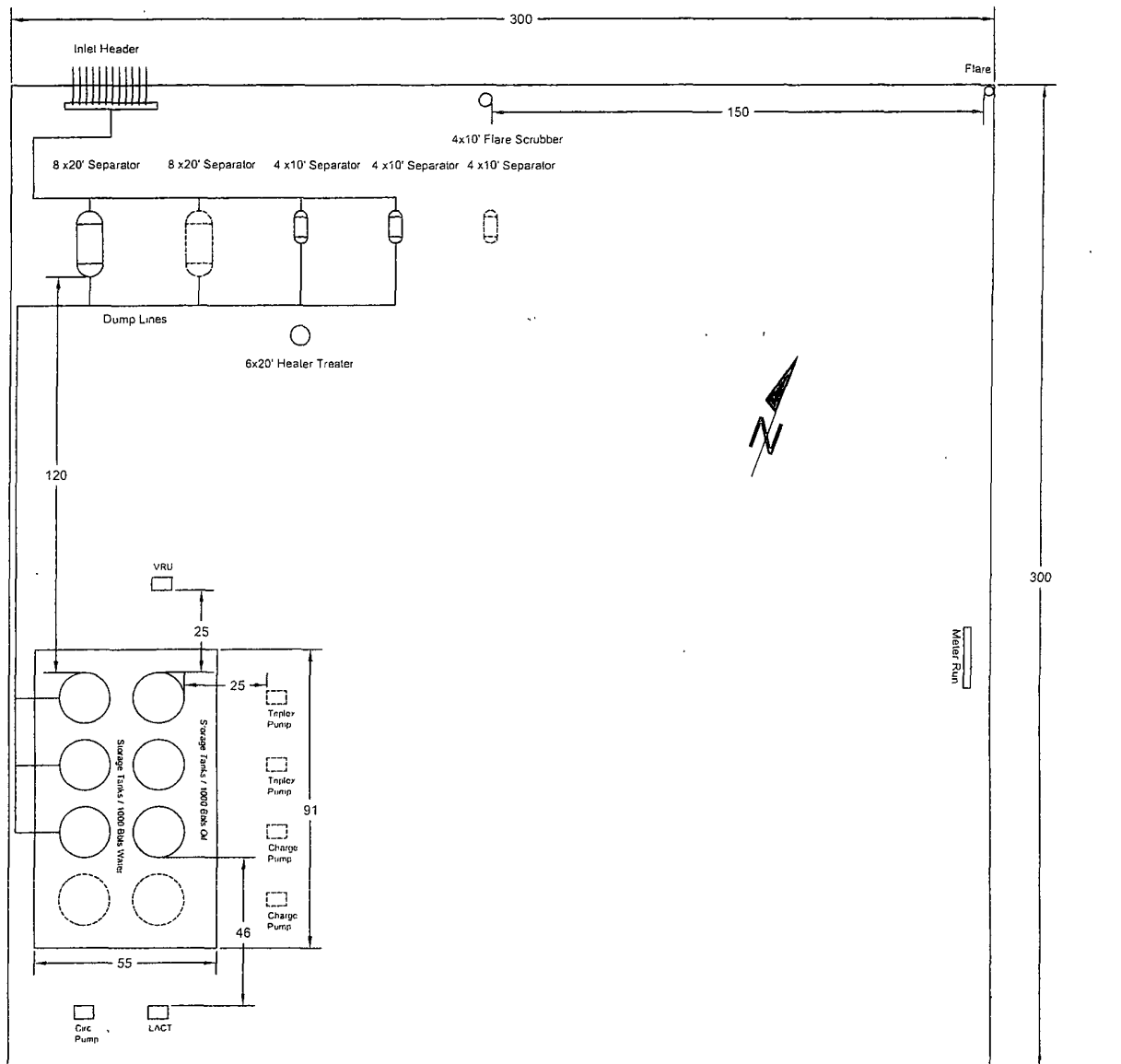
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Artesia Yeso Federal Unit #1 Facilities Layout

All Units in Feet



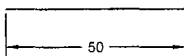


Road

Road

Artesia Yeso Federal Unit CTB Facilities Layout

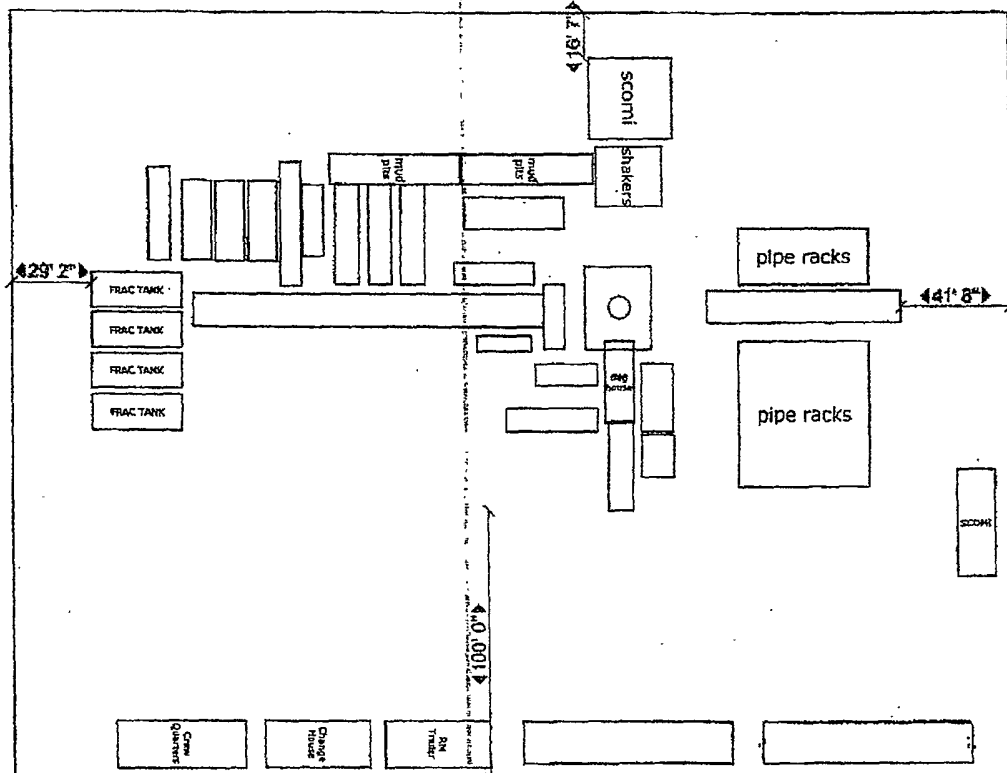
All Units in Feet



----- Future Expansion

RL-CL-4

260'



250'

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA WTP Limited Partnership
LEASE NO.:	NM048344
WELL NAME & NO.:	8 Piglet 21 Federal
SURFACE HOLE FOOTAGE:	727' FNL & 462' FWL
BOTTOM HOLE FOOTAGE	
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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Apply for sundry notice for tank battery/flowline**
 - Berming**
 - Cave/Karst**
- ☐ **Construction**
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 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - High/Karst Cave Potential
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 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
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 - Electric Lines
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