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	Pool Code	Pool Name
30-015-40434	96830	Artesia; Glorieta-Yeso (O)

Property Code	Property Name	Well Number
309602	PIGLET 21 STATE	19

OGRID No	Operator Name	Elevation
192463	OXY USA WTP Limited Partnership	3654'

Surface Location

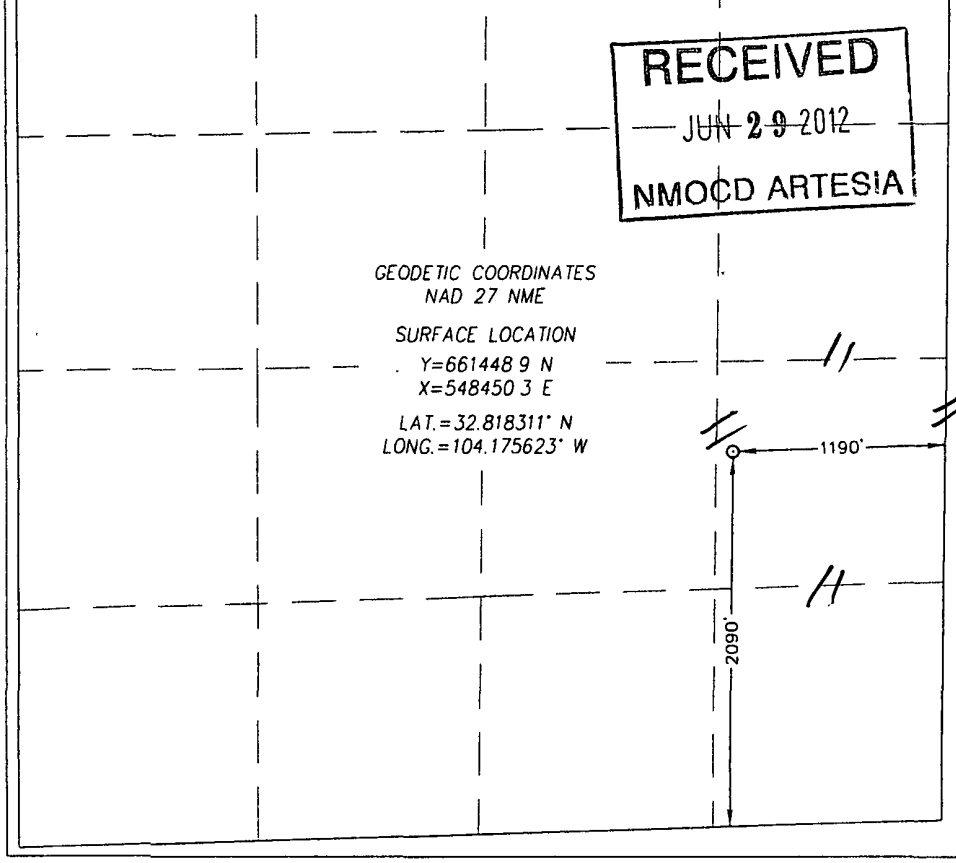
UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	21	17-S	28-E		2090	SOUTH	1190	EAST	EDDY

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 or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

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

Signature Date

Jennifer Duarte
Printed Name

jennifer_duarte@oxy.com
E-mail Address

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 supervision, and that the same is true and correct to the best of my belief.

MAY 15, 2012
Date of Survey

Signature & Seal of Professional Surveyor:

RONALD J. EIDSON NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

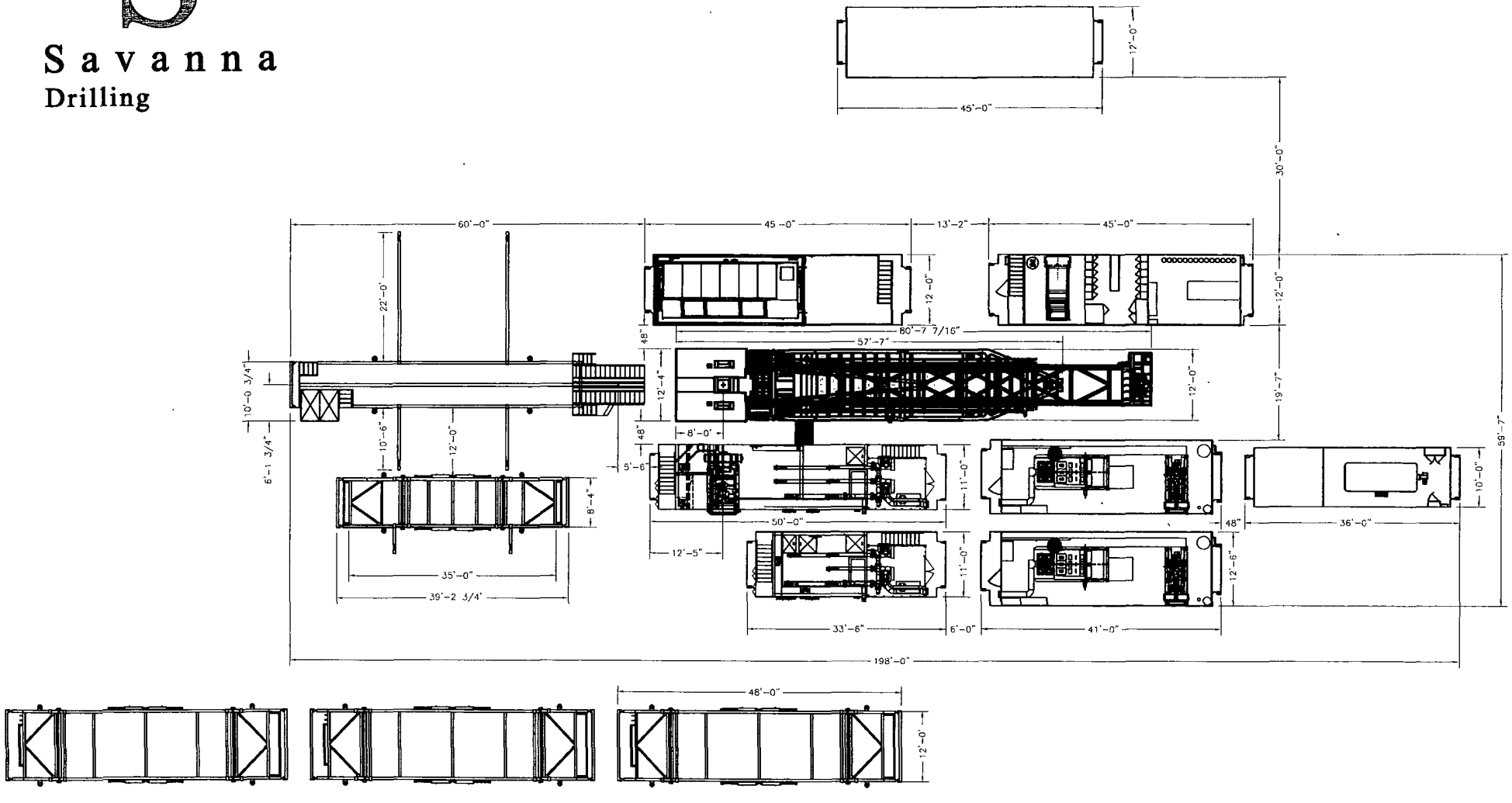
Ronald J. Eidson 6/26/2012

Certificate Number ..... Gary L. Eidson 12641
Ronald J. Eidson 3239

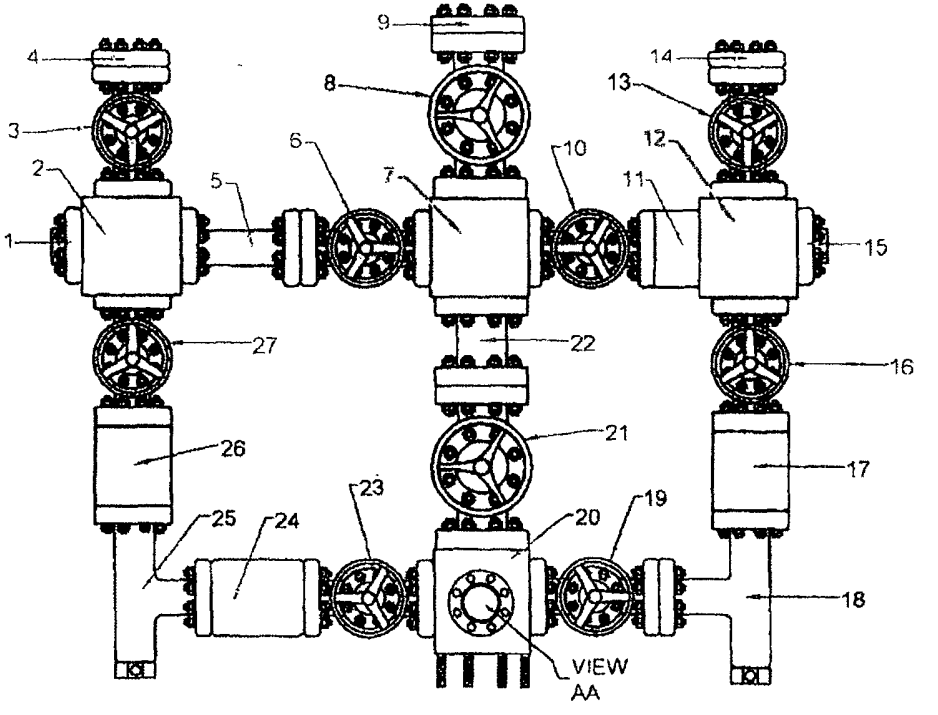
AF JWSC W.O.: 12 11.0733

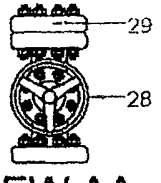
Savanna
Drilling

TDS3000



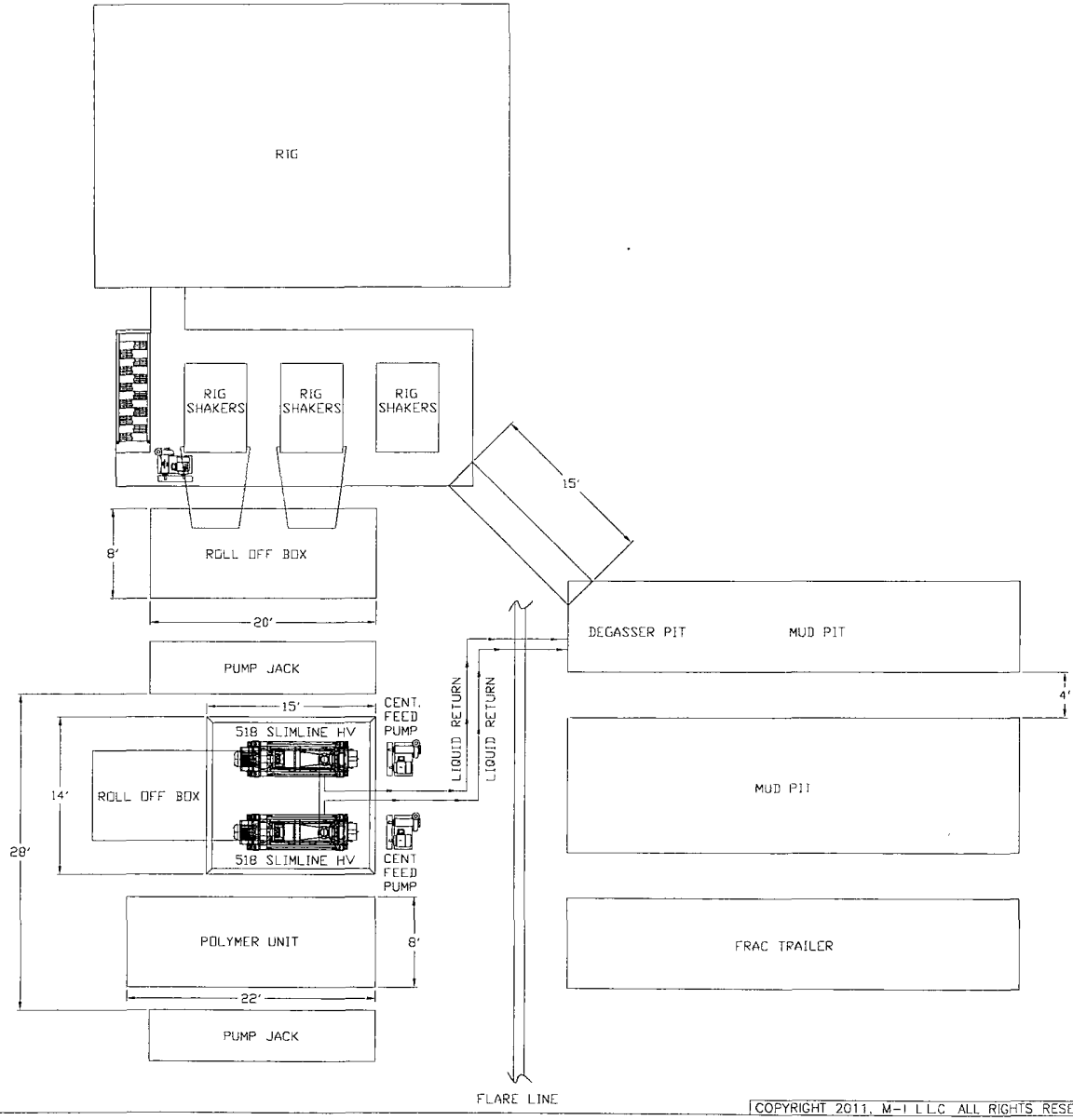
RIG #





VIEW AA

Scale: N.T.S	Date:	Description: 3-1/8" x 2-1/16" 3000# NACE TRIM SINGLE GUT CHOKE & KILL MANIFOLD SYSTEM	PACIFIC VALVE SERVICES INC
Drawn by: RAVI MANI	DWG#		
Checked by:	REV 00		



REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED

MI SWACO
5950 NORTH COURSE DRIVE HOUSTON, TEXAS 77072

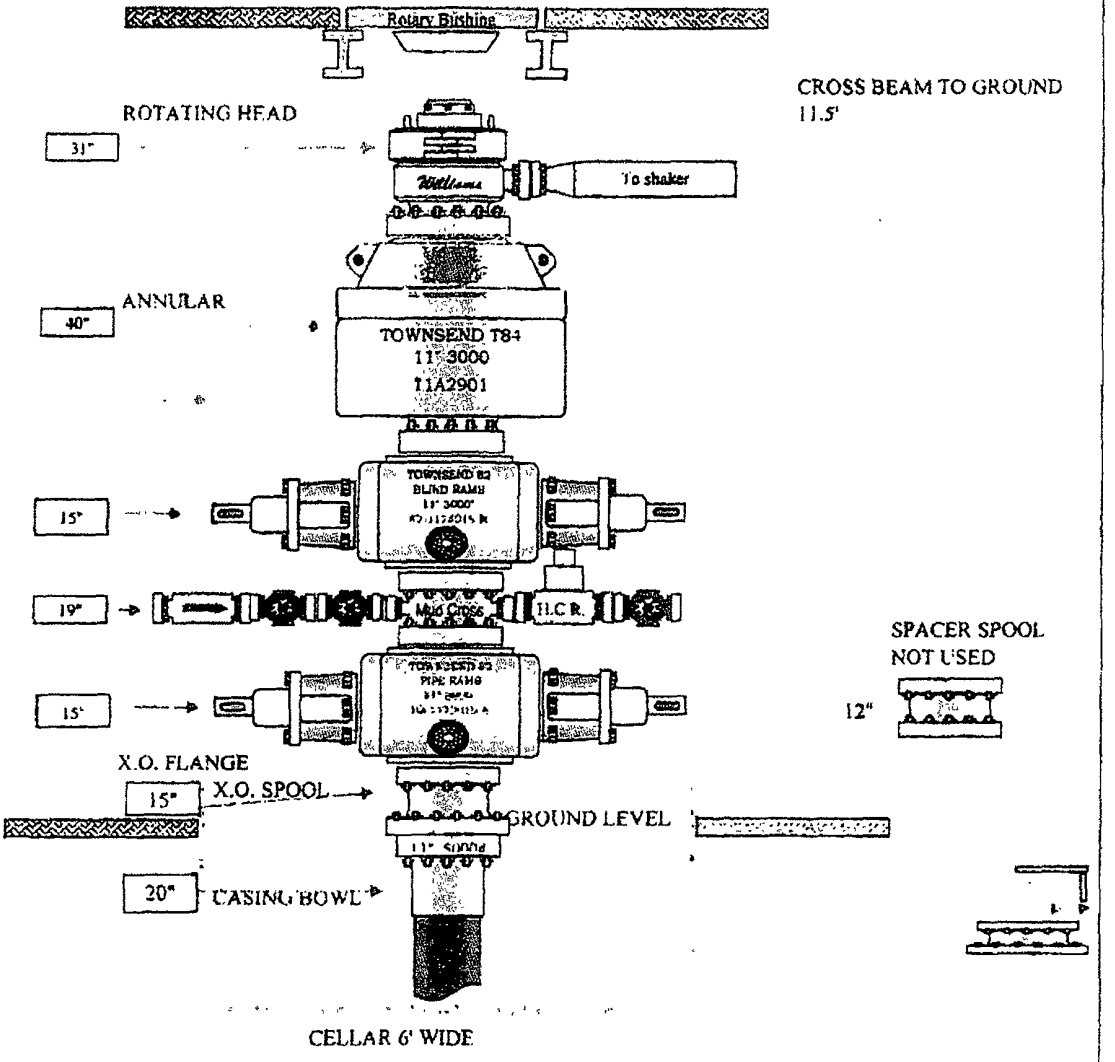
SOLIDS CONTROL AND DEWATERING PROPOSAL GA

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

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


Rotary Bushing
CROSS BEAM TO GROUND
11.5'
ROTATING HEAD
31"
Williams
To shaker
ANNULAR
40"
TOWNSEND T84
11" 3000
11A2901
15"
19"
Mud Cross
11.C R.
SPACER SPOOL
NOT USED
12"
15"
X.O. FLANGE
15"
X.O. SPOOL
GROUND LEVEL
20"
CASING BOWL
CELLAR 6' WIDE

APD DATA – DRILLING PLAN –

OPERATOR NAME / NUMBER: OXY USA WTP Limited Partnership / 192463

LEASE NAME / NUMBER: Piglet 21 State # 19 **Federal Lease No:**

STATE: NM **COUNTY:** Eddy

SURFACE LOCATION: 2090' FSL & 1190' FEL, Sec 21, T17S, R28E

BOTTOM HOLE LOCATION: 2090' FSL & 1190' FEL, Sec 21, T17S, R28E

C-102 PLAT APPROX GR ELEV: 3654'

EST KB ELEV: 3668' (14' KB)

23. GEOLOGIC NAME OF SURFACE FORMATION:

a. Permian

24. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	TV Depth Top	Expected Fluids
Rustler	352	
Tansil	498	None
Yates	625	None
Seven Rivers	755	
Queen	1438	
San Andres	2187	
Glorietta	3571	Oil
Tubb – Base Yeso	5069	Oil
TD	5200	TD

C. 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.

GREATEST PROJECTED TD 5200' MD / 5200' TVD **OBJECTIVE:** Yeso

25. CASING PROGRAM:

Surface Casing: 9.625" casing set at ± 400' MD/ 400' TVD in a 12.25" hole filled with 8.40 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 400'	400'	36	J-55	ST&C	2020	3520	394	8.921	8.765	14.99	2.01	31.39

Production Casing: 5.5" casing set at ± 5200'MD / 5200'TVD in a 7.875" hole filled with 10.00 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 5200'	5200'	17	L-80	LT&C	6290	7740	338	4.892	4.767	2.33	3.54	4.51

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

26. CEMENT PROGRAM:

Surface Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft^3/sk	24 Hr Comp
Surface (TOC: 0' – 400')							
Lead: 0' – 400' (150% Excess)	150	400'	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' – 400' (150% Excess)	250	400'	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' - 5200'							
Lead: 0' – 3000' (125 % Excess)	940	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' – 5200' (125 % Excess)	1140	2200'	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

27. PRESSURE CONTROL EQUIPMENT:

Surface: 0 – 400' None.

Production: 0 - 5200' 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 .

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.

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.

28. MUD PROGRAM:

Depth	Mud Wt ppg	Vis Sec	Fluid Loss	Type System
0 – 400'	8.4 – 8.9	32 – 34	NC	Fresh Water /Spud Mud
400' – TD	9.8 – 10.0	28 – 29	NC	Brine Water

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.

29. 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.

30. LOGGING / CORING AND TESTING PROGRAM:

A. Mud Logger: None.

B. DST's: None.

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

31. POTENTIAL HAZARDS:

G. 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.

H. The bottomhole pressure is anticipated to be 2500 psi

I. 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.

32. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

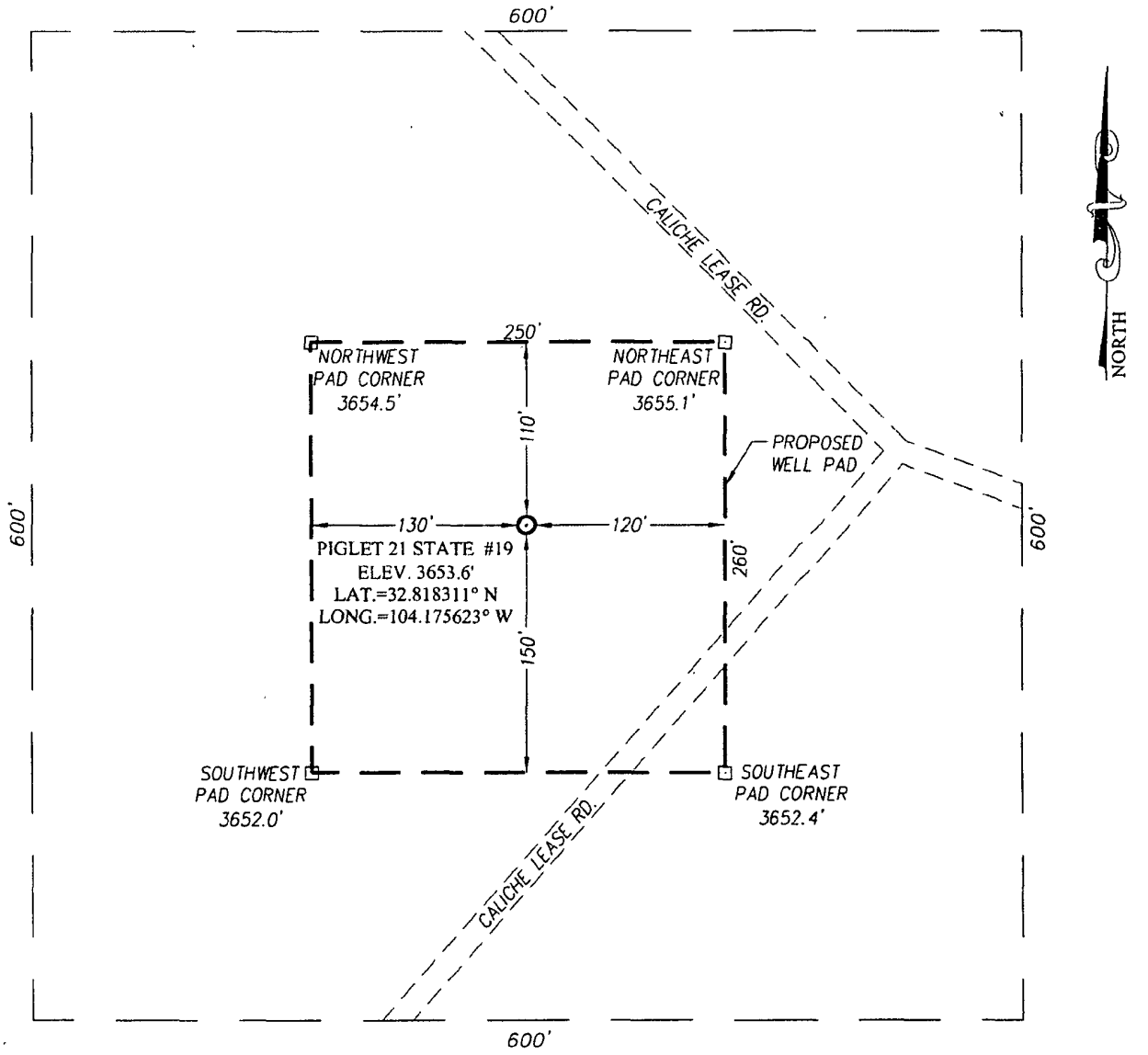
Road and location construction will begin after the NMOCD has approved the APD. Anticipated spud date will be as soon as possible after NMOCD approval and as soon as a rig will be available. Move in operations and drilling is expected to take 15 days. If production casing is run, then an additional 30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

33. 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

SECTION 21, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.

EDDY COUNTY NEW MEXICO



100 0 100 200 Feet

Scale: 1"=100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND RED LAKE ROAD, GO NORTH APPROX. 1.4 MILES ON RED LAKE ROAD. TURN LEFT AND GO NORTHWEST APPROX. 0.4 MILES TO THE LOCATION.

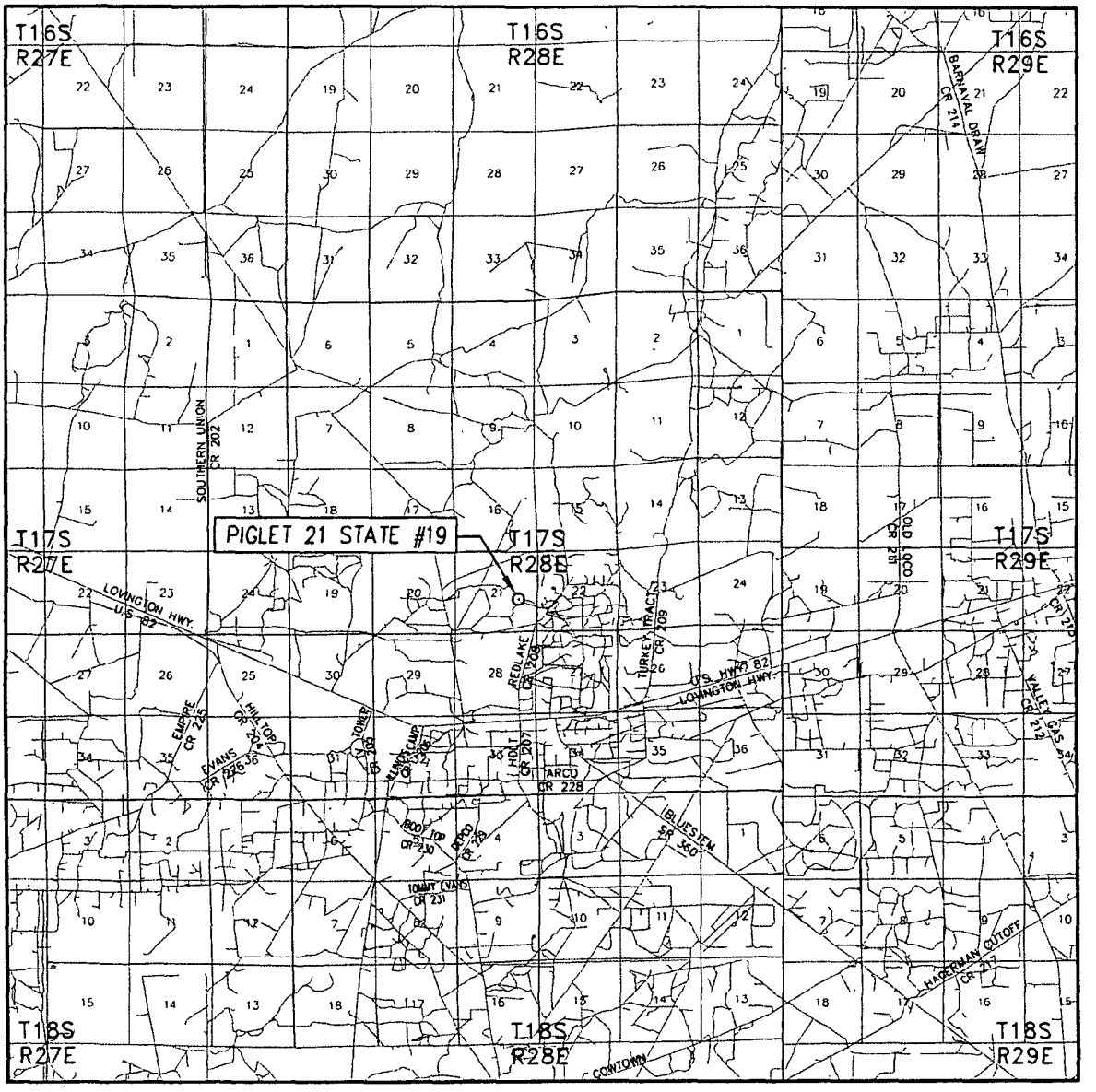
PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

OXY USA WTP Limited Partnership

PIGLET 21 STATE #19 WELL
LOCATED 2090 FEET FROM THE SOUTH LINE
AND 1190 FEET FROM THE EAST LINE OF SECTION 21,
TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

Survey Date: 5/15/12	CAD Date: 5/6/12	Drawn By: AF
W.O. No.: 12110733	Rev: .	Rel. W.O.:	Sheet 1 of 1

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 21 TWP. 17-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 2090' FSL & 1190' FEL

ELEVATION 3654'

OPERATOR OXY U.S.A. INC.

LEASE PIGLET 21 STATE

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N DAL PASO
HOBBS, N.M. 88240
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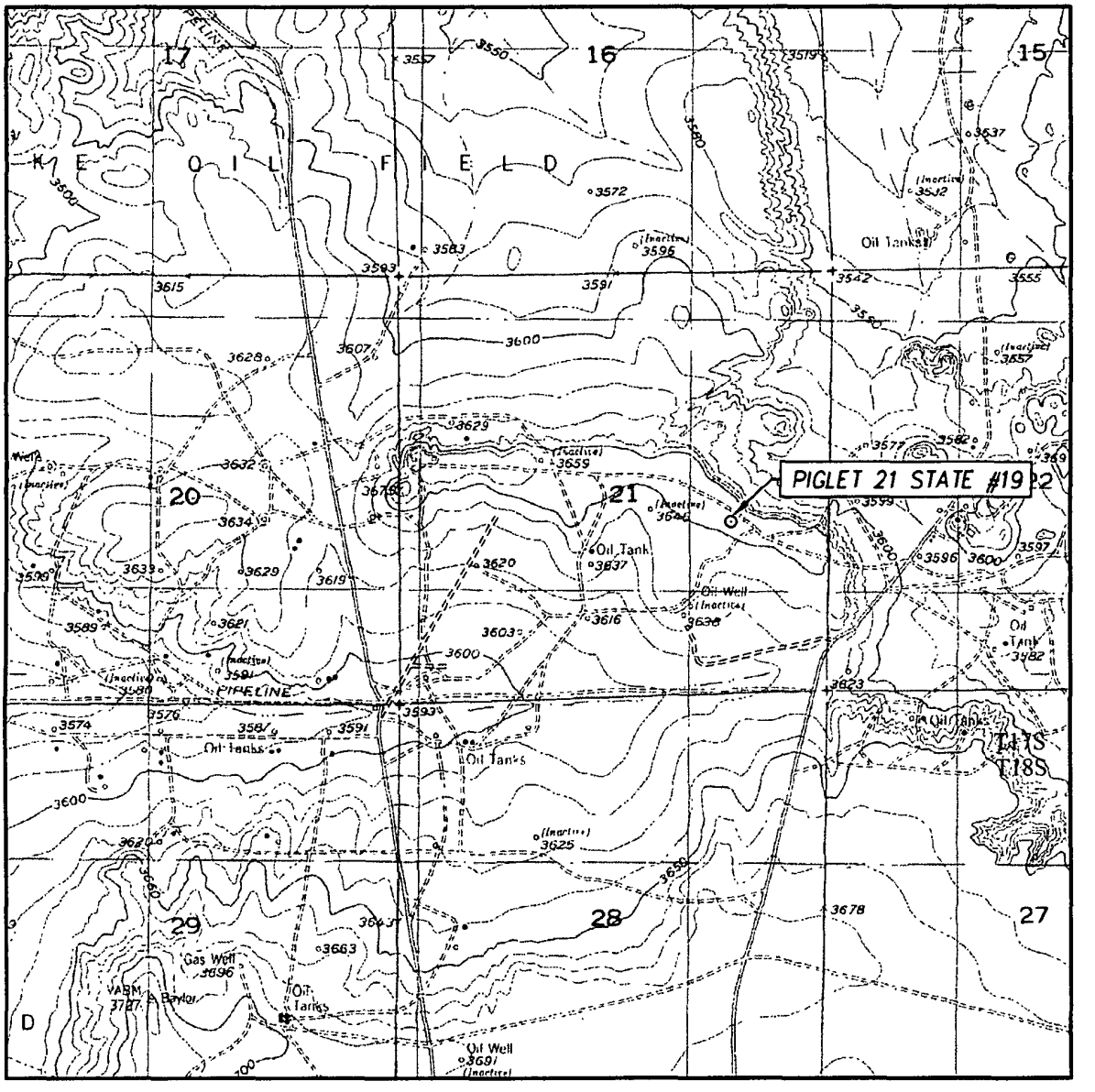
LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
RED LAKE, N.M. – 10'

SEC. 21 TWP. 17-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 2090' FSL & 1190' FEL

ELEVATION 3654'

OPERATOR OXY U.S.A. INC.

LEASE PIGLET 21 STATE

U.S.G.S. TOPOGRAPHIC MAP
RED LAKE, N.M.

PROVIDING SURVEYING SERVICES
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