Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM-04827-B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No
MOC Federal #1

2. Name of Operator
OXY USA WTP LP (Attn: David Stewart)

9. API Well No.
30-015-27928

3a. Address
P.O. Box 50250, Midland, TX 79710

3b Phone No (*include area code*)
432-685-5717

10 Field and Pool, or Exploratory Area
South Dagger Draw/
Upper Pen Associate

4. Location of Well (*Footage, Sec., T., R., M., or Survey Description*)
B, Sec. 1, T21S, R23E
990' FNL 1855' FEL

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[X] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection)

OXY USA WTP LP request the BLM review for approval the attached coil tubing/acid stimulation.

Please see attached proposed word procedure, and WBD.

RECEIVED
NOV 16 2011
NMOCD ARTESIA

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record
NMOCD

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Jereme Robinson/ jereme_robinson@oxy.com

Title
Sr. Regulatory Analyst

Date 10/13/2011

APPROVED
NOV 14 2011
WESLEY W. INGRAM
PETROLEUM ENGINEER

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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

Office

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.

MOC FEDERAL # 001
API#: 30-015-27928
Lease #: NM-04827-B
LOCATION: Sec 1, T21S-R23E
SURFACE HOLE LOCATION: 990' FNL & 1855' FEL
EDDY COUNTY, NEW MEXICO

PROJECT: Coil Tubing Stimulation – Upper Penn formation

OBJECTIVE: The well was drilled and completed with 7" csg with TOC at surface in July 1994. Upper Penn formation was perforated/acidize and put on production. The well is a Rod Pump producer well. This well was select for the Coil Tubing Stimulation pilot. In addition to the economic opportunity, this project is expected to incorporate an innovative stimulation technique to improve the base production of all the wells in the North New Mexico / Terrell. Successful results would extend this technology application further in the Upper Penn, Yeso, Wolfcamp and 1st Bone Spring, which have been extensively developed with vertical wells.

WELL TYPE: PRODUCER
CURRENT PRODUCTION: 0.1 BO, 0 BW, 10 MSCFD (HOLE IN TUBING)

ANTICIPATED PRODUCTION: 39 BO, 565 BW, 558 MSCFD
CURRENT LIFT METHOD: BEAM PUMP
NEW LIFT METHOD: BEAM PUMP

WELL INFORMATION: All Depths Are Measured Depths
Spud Date: June 19, 1994
TD: 8050' MD PLUGBACK: 7713' MD
KB: 17'

PROPOSED UPPER PENN PERFORATIONS: Jet out four (4) - 7/8" perforations at 7565' w/ 90 deg phasing. Acid Stimulate perforations w/ 15% HCl.

CASING DETAIL:

SIZE (IN)	Weight (LB/FT)	Grade	Burst Press (psi)	Depth (FT)	Bit Size (INCH)	CMT (SX)	TOC (FT)	TECHNIQUE (TS, CBL, CIRCULATED, CALCULATED)
9-5/8"	36#	K-55		1163'	12-1/4"	1100	0	Circulated
7"	23# & 26#	K-55		8048'	8-3/4"	1160	0	Circulated

TUBING DETAIL (current):

Part Type	Name of Component	Install Date	Total Quantity	Total Length	Top Depth	Bottom Depth
Polished Rod	1.500 (1 1/2 in.) C x 26 - w/Polished Rod Liner	01/12/2011	1	26	13	39
Rod	0.875 (7/8 in.) D90 x 25 Rod - GUIDED	01/12/2011	42	1050	239	1289
Rod	1.000 (1 in) N-97 (HS) x 25 Rod - N/A	01/12/2011	80	2000	1289	3289
Rod	1 240 (1 1/4 in.) FG x 37.5 Rod - N/A	01/12/2011	116	4350	3289	7639
Rod Pump (Insert)	Rod Pump (Insert) (NON-SERIALIZED) - 25-175-RHBC-26-4 (Bore = 1.75)	01/12/2011	1	26	7651	7677
Rod Sub (Enter Length)	Rod Sub(s) FIBERGLASS	01/12/2011	1	9	7642	7651
Rod Sub (Enter Length)	Rod Sub(s)FIBERGLASS	01/12/2011	1	3	7639	7642
Sinker Bar	1.250 (1 1/4 in.) K x 25 Sinker Bar - N/A	01/12/2011	8	200	39	239
Mud Anchor	Bull Plug Mud Anchor 2.875" - N/A	06/02/2010	1	32	7683	7715
Perforated Tubing Sub	Perforated Tubing Sub 2.875" - N/A	06/02/2010	1	4	7679	7683
Seat Nipple / Shoe	Seat Nipple - Standard (2 875") Cup Type - N/A	06/02/2010	1	1	7678	7679
Tubing - OD 2 875	L-80 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift - N/A	06/02/2010	235	7441	13	7454
Tubing - OD 2 875	L-80 T-K 99 2.875 OD/ 6 50# T&C External Upset 2 441 ID 2.347 Drift - N/A	06/02/2010	7	219	7456	7678
Tubing Anchor/Catcher	Tubing Anchor/Catcher 7 000" - N/A	06/02/2010	1	2	7519	7521
Tubing Sub - OD 2.875	L-80 2 875 OD/ 6.50# T&C External Upset 2.441 ID 2 347 Drift - N/A	06/02/2010	1	2	7454	7456

DEVIATION SURVEY:

MD	Degree
160	1
375	0.75
575	0.75
821	0.75
1039	1
1163	0.75
1649	0.75
2149	0.25
2554	0.25
3026	0.5

MD	Degree
3524	0.5
3996	0.75
4116	1
4248	1.75
4375	2.5
4498	2.75
4593	3.25
4688	3.25
4782	3.5
4876	4

MD	Degree
4939	4
5001	4
5064	4
5136	4.25
5194	4
5267	3.75
5350	4
5443	4
5536	4
5647	3.75

MD	Degree
5728	3.5
5853	3.5
5947	3.75
6044	3.5
6170	3.25
6327	3
6826	1.75
7330	2.75
7649	1.75
8050	1.5

ANY KNOWN CASING PROBLEMS: None

OPERATIONAL COMMENTS:

- Use 2% KCl water as completion if necessary. Use real KCl, not liquid substitutes.
- *Oxy will provide 1 tank with 4000 gallons filtered to 10 microns or city water. These amount is required to jet out the four laterals.*
- Oxy will provide 400 glns of 15% HCL plus additives to stimulate perforations (Acid volume subject to change).

RECOMMENDED PROCEDURE:

NOTE: PLEASE CALL PC'S (JERRY HARRISON OR VAN BARTON) AT (575) 628-4110/4111 AND THE PUMPER FOR THE RUN (ASK PC FOR CONTACT INFORMATION, IF NECESSARY) TO INFORM THEM OF YOUR WORK ON THE WELL 48 HOURS PRIOR TO THE JOB, OR AS SOON AS POSSIBLE, IF THAT TIME IS PASSED. ALSO, CONTACT BLM-CARLSBAD 24 HOURS PRIOR TO WORK.

Well preparation

1. MIRU PU.
2. Ensure the well is dead. ND WH. NU BOP.
3. POOH LD Rod string and Rod Pump.
4. POOH LD 2-7/8" tubing. Scan tubing.
5. Clean tubing to remove scale and/or paraffin.
6. RIH bit and scraper on 2-7/8" working string to 7,700'. POOH.
7. Run the **Deflecting Shoe** in the hole with 12 jts of clean 2-3/8" tubing. Continue run with clean 2-7/8" tubing to just below 7565'.
8. RU wireline unit. Run a GR/CCL log to correlate shoe to the log and adjust to 7565'. RD wireline unit.

Rig up coiled tubing unit

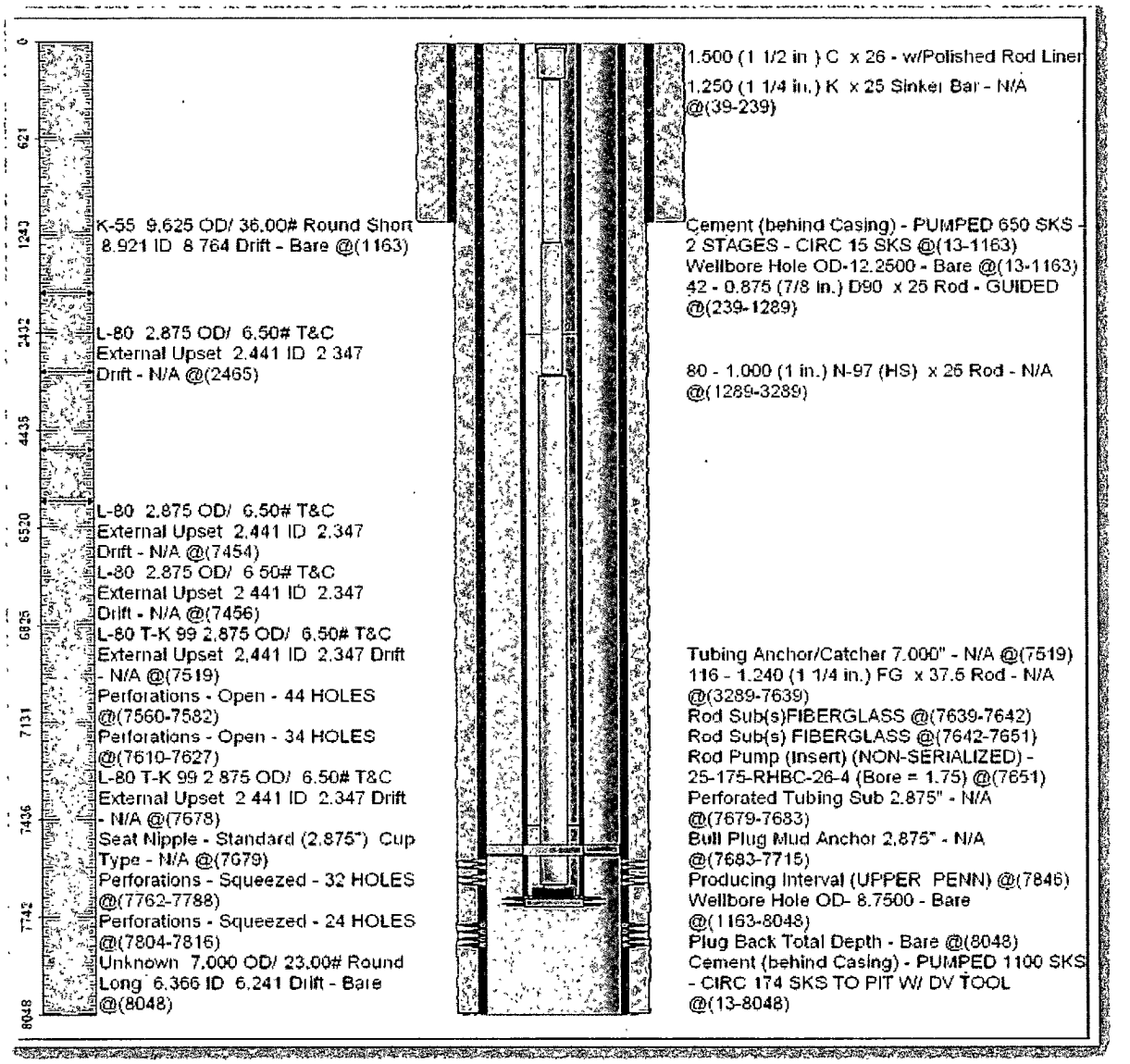
Jet 4 perforation holes at 0°, 90°, 180° and 270° in Upper Penn formation at **7565'**.

9. Run mud motor with perforating mill on coil tubing inside the 2-7/8" tubing. Mill a perforation hole in 7" casing at **7565'** using a **7/8" mill on a flex shaft**.
10. Pull out mud motor and attach **jetting hose and nozzle** and run back in.
11. Jet out perforation for effective acid penetration of up to 300' from the wellbore at **7565'**.
12. Acidize the perforation. Stimulate w/ approximately 100 glns of 15% HCL with Fercheck plus 0.2% corrosion inhibitor, 0.2% surfactant and 0.4% iron control. Displace with 2% KCL. (Acid volume subject to change).
13. Pull out the jetting hose and nozzle
14. Rotate tubing 90 degrees **(90°)**
15. Repeat steps 11, 12, 13, 14 and 15
16. Rotate tubing 90 degrees **(180°)**
17. Repeat steps 11, 12, 13, 14 and 15
18. Rotate tubing 90 degrees **(270°)**
19. Repeat steps 11, 12, 13, 14 and 15
20. POH 2-7/8" tubing and LD the deflecting shoe.
21. RDMO Coil Tubing Unit.

Permanent Completion

22. RIH with 2-7/8" tubing and Seating Nipple (same as original).
23. Land the TAC at 7519', which should land the Seating Nipple at roughly 7678'.
24. RIH with Rod pump and Sucker rods. Rod Pump design will be provided by Mike McNeely's group.
25. Land and space out the pump. Ensure that the well pumps up properly.
26. RDMO PU. Install pumping unit installation and startup.
27. Turn Over To Production.

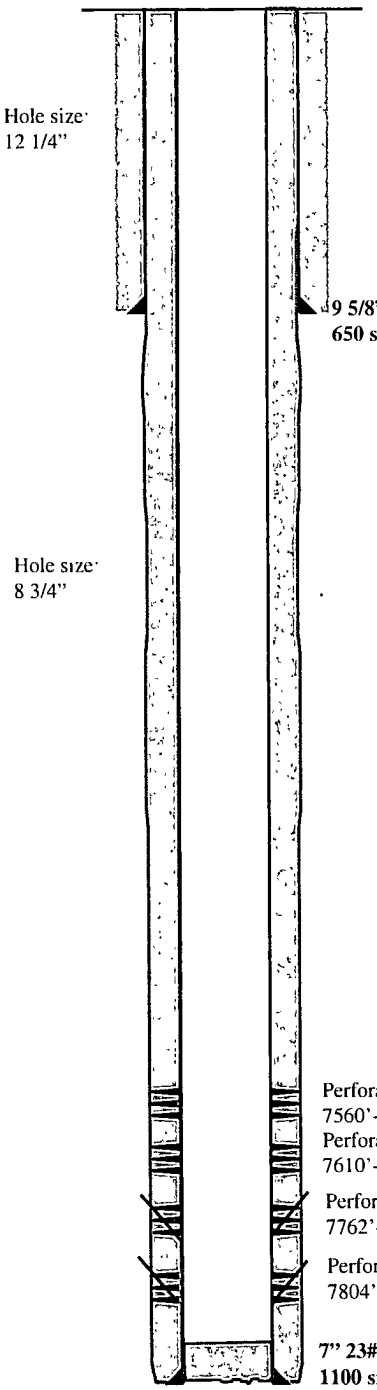
WELLBORE SCHEMATIC



OCCIDENTAL OIL AND GAS CORPORATION

WELLBORE DIAGRAM AND INFORMATION

Well Name:	MOC Federal #001	**Field:**	Indian Basin
Date:	20-Sep-2011	**Location:**	990' FNL & 1855' FEL Sec. 1 T21S-R23E
County:	Eddy County	**State:**	New Mexico



Perforations – Proposed – Penn Upper (Cisco)
7565' (4 SPF)

Spud:	**6/19/94**
KB:	**17'**
TD:	**8050' MD**
PBTD:	**7713' MD**
API #:	**30-015-27928**

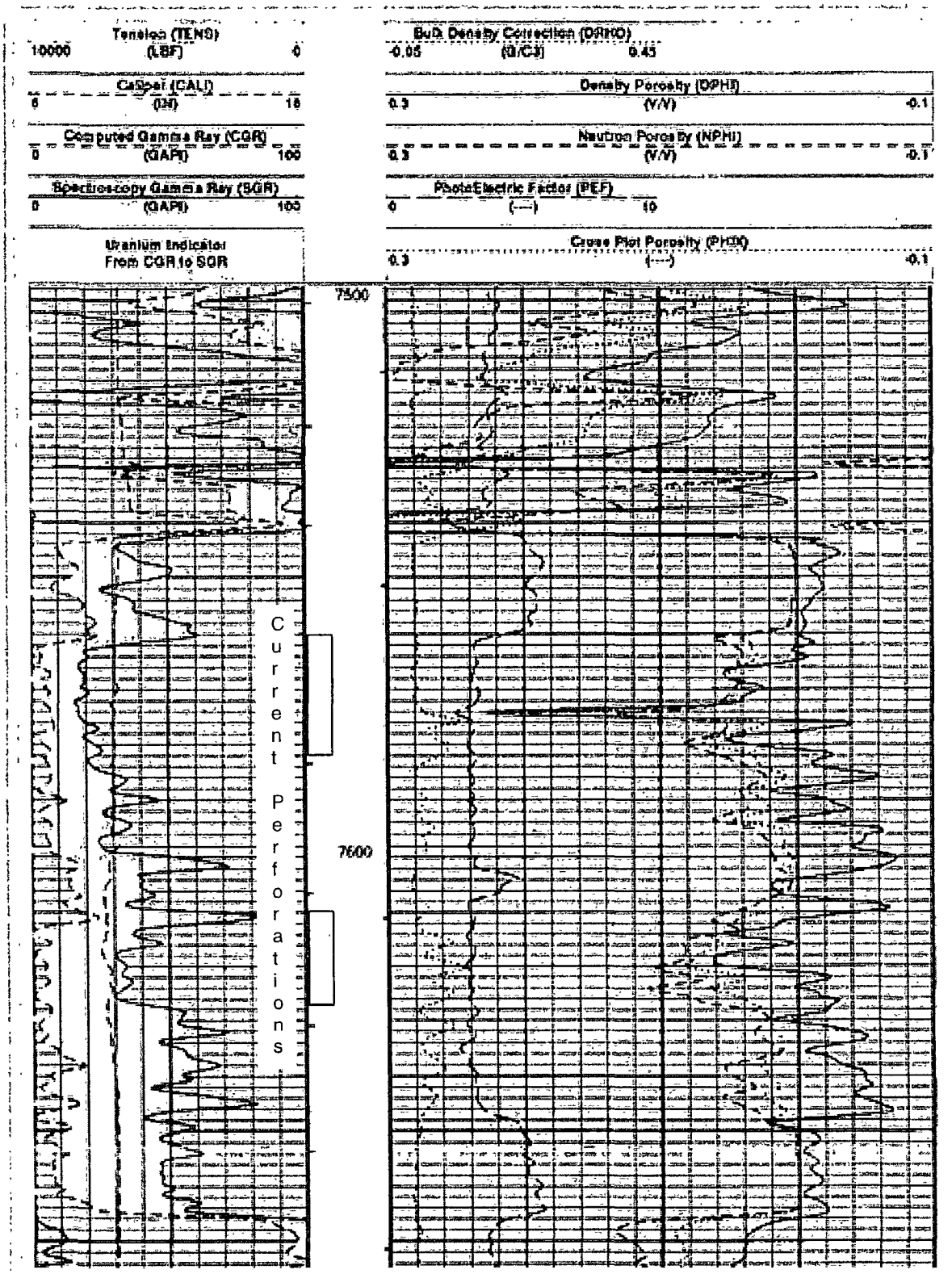
CASING DETAIL				
Size	Weight	Grade	Depth	Cement
9 5/8"	36#	K-55	Surf-1163'	650 sx
7"	23# & 26#	K55	Surf-8048'	1160 sx

TUBING DETAIL				
Size	Weight	Grade	Depth	Detail

ROD DETAIL				
Size	Weight	Grade	Depth	Detail

PUMP DETAIL
New Rod Pump Design

Created By: T. Russell
Revised Date. 9/21/2011


Tension (TENS)
10000 (LBF) 0
Bulk Density Correction (DRHO)
-0.05 (G/C3) 0.45
Caliper (CALI)
6 (IN) 16
Density Porosity (DPHI)
0.3 (V/V) -0.1
Computed Gamma Ray (CGR)
0 (GAPI) 100
Neutron Porosity (NPHI)
0.3 (V/V) -0.1
Spectroscopy Gamma Ray (SGR)
0 (GAPI) 100
PhotoElectric Factor (PEF)
0 (---) 10
Uranium Indicator
From CGR to SGR
Cross Plot Porosity (PHIX)
0.3 (---) -0.1
7500
7600
Current Perforations

MOC Federal 1
OXY USA WTP LP
November 14, 2011
Conditions of Approval

1. **Surface disturbance beyond the originally approved pad must have prior approval.**
2. **Closed loop system required.**
3. **Operator to have H2S monitoring equipment on location.**
4. **A minimum of a 3000 (3M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (3M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.**
5. **All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.**
6. **Operator to submit a subsequent sundry with details of work performed including a new well test.**

WWI 111411