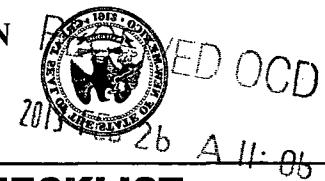


ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

~~Note: Statement must be completed by an individual with managerial and/or supervisory capacity.~~

<u>David Stewart</u> Print or Type Name	<u>[Signature]</u> Signature	<u>Regulatory Advisor</u> Title	<u>2/26/13</u> Date
		<u>david_stewart@oxy.com</u> e-mail Address	

OXY USA Inc.
 Harmon 15 #3 - 30-015-29233

To: New Mexico Oil Conservation Division
 Attn: William V Jones

(16696)

OXY USA Inc formally requests an increase in maximum injection pressure to 1000psi for the following approved SWD permit. The justification will be presented herein.

Well Name: Harroun 15 #3 ~~SWD~~ (BLM)
 API# 30-015-29233
 ULSTR: H-15-24S-29E
 SWD Permit# 1326 5/10/12

✓ ✓ ✓ 608 PSI

The Harroun 15 #3 SWD well is completed in the Bell Canyon (3041' - 3765') with 2.375" Duoline tubing (1.81" ID) set at a depth of 2992'. See Figure 1 below:

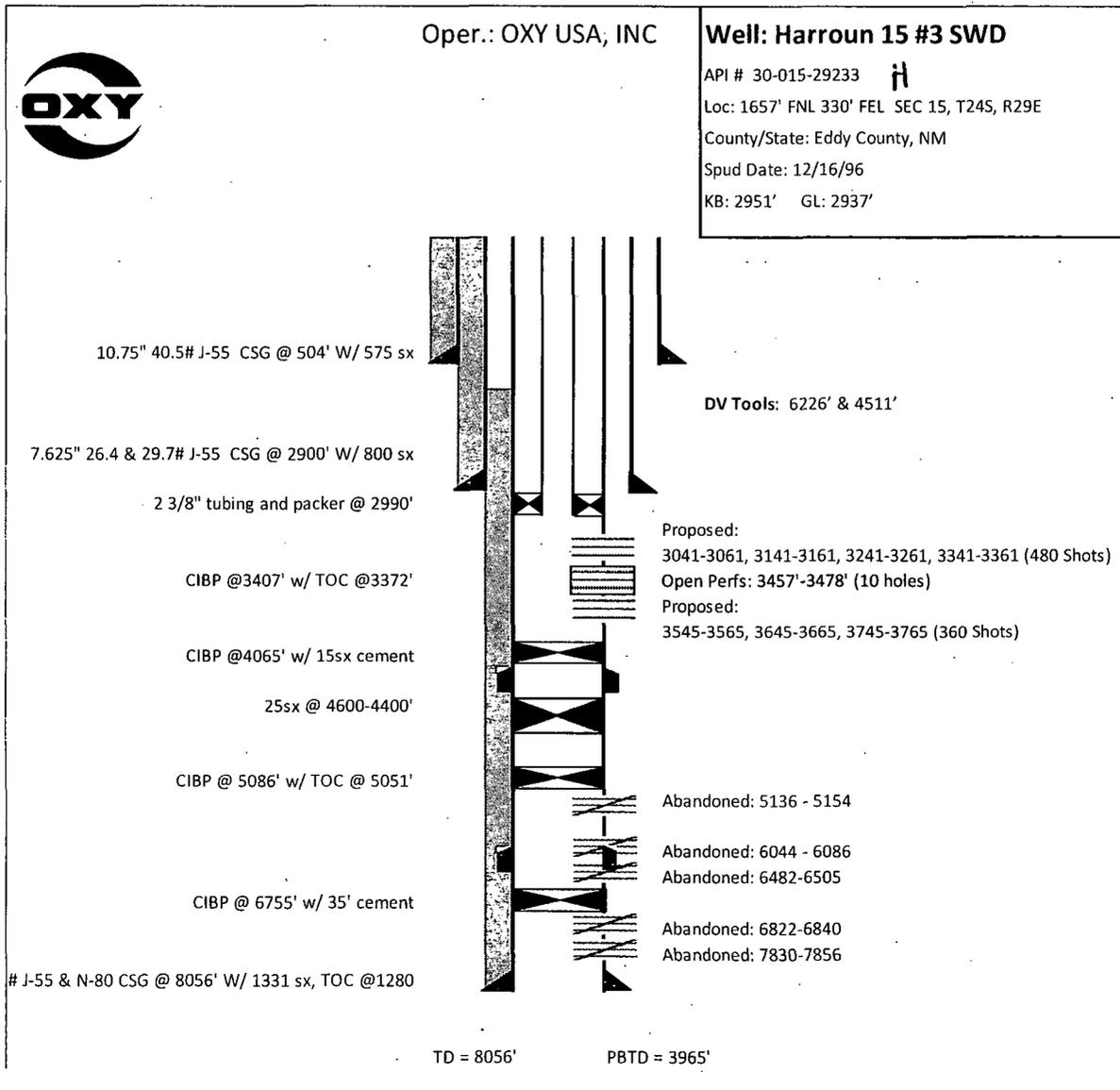


Figure 1: Harroun 15 #3 SWD Well Schematic.

On 2/15/2013 a planned step rate test was performed on the Harroun 15 #3 well to identify the formation parting pressure, thus determining a maximum allowable injection pressure. The well was back flowed for 24hrs, then shut-in for an additional 24hrs prior to the test to ensure the most representative shut-in tubing head pressure was obtained. The step-rate test was then conducted at the below rates utilizing lease water and a mobile pump truck. Pump rates were maintained for 20 minutes to achieve a stable injection pressure.

Harroun 15 #3 Step Rate Data			
Rate (bbls/day)	Rate (bbls/min)	Vol Pumped (bbls)	20min THP (psi)
360	0.25	5	391
720	0.5	10	360
1440	1	20	405
2160	1.5	30	510
2880	2	40	680
3600	2.5	50	830
4320	3	60	1080
5040	3.5	70	1240
5760	4	80	1580
6480	4.5	90	1830

Table 1. Harroun 15 #3 SWD Step Rate test data.

The formation parting pressure was not observed during the step-rate test and the pump truck reached its maximum output at 4.5 bbls/min, thus the test had to be terminated. Modelling conducted after the test has determined that the pressure drop due to friction in the 2.375" tubing was preventing the bottom hole pressure from reaching the formation parting pressure.

The frac gradient was determined to be 0.765 psi/ft during the fracture stimulation treatment performed as a part of the recompletion procedure. At the formation depth of 3041' that represents a frac pressure of ~2300psi. This data is represented in Figure 2. The calculated flowing bottom hole pressure during the test was calculated to have never exceeded 1850psi due to the high pressure drop in the small ID tubing as a result of friction. The requested 1000psi injection pressure represents an equivalent bottom hole pressure well below the calculated frac gradient.

Please advise if any additional data is required in order to make a ruling of the proposed increase in permitted injection pressure.

Best regards

Mike Fisher
 Senior Production/ Operations Engineer
 SE New Mexico Reservoir Management Team
 OXY Permian Primary Development.
 Office# +1 (713) 552-8585

0.765
 GRADIENT



Figure 2: Harroun 15 #3 SWD Step Rate Test Data.

Submit To Appropriate District Office
Two Copies
District I
1625 N. Freach Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
Revised August 1, 2011
1. WELL API NO.
30-015-29233
2. Type of Lease
 STATE FEE FED/INDIAN
3. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing:
 COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)
 C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)

5. Lease Name or Unit Agreement Name
Herman 15
6. Well Number:
3

7. Type of Completion:
 NEW WELL WORKOVER DEEPENING PLUGBACK DIFFERENT RESERVOIR OTHER Convert to SWD - 1326

8. Name of Operator
OXY USA Inc.

9. OGRID
16696

10. Address of Operator
P.O. Box 50250 Midland, TX 79710

11. Pool name or Wildcat
SWD, Delaware Cedar Canyon

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	H	15	24S	29E		1657	North	330	east	Eddy
BH:										

13. Date Spudded 12/16/96
14. Date T.D. Reached 11/1/97
15. Date Rig Released 11/14/97
16. Date Completed (Ready to Produce) 9/29/12
17. Elevations (DF and RKB, RT, GR, etc.) 2937' GL
18. Total Measured Depth of Well 8056'
19. Plug Back Measured Depth 3765'
20. Was Directional Survey Made? N/A
21. Type Electric and Other Logs Run N/A

22. Producing Interval(s), of this completion - Top, Bottom, Name
Delaware 3041-3765'

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"	40.5	201'	14 3/4"	575x Surf	N/A
7 7/8"	26.4-29.7	2900'	9 7/8"	805x Surf	N/A
4 1/2"	11.6	8056'	6 3/4"	1331x-1280' GR	N/A

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8"	2990'	2990'

26. Perforation record (interval, size, and number)
65PF @ 3041-3417, 3509-3765' Total
840 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.
DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED
4600-4365' 255x Cl Cement
4065-3965' 155x Cl Cement - 48PF @ 4065'
3041-3765' 2104lb WFRAC + 1100lb 158cc/dt

28. PRODUCTION 2578089 DF w/ 60420# sand
Date First Production Injection 12/17/12
Production Method (Flowing, gas lift, pumping - Size and type pump)
Well Status (Prod. or Shut-in) Injective

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl	Gas - Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API - (Corr.)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)
30. Test Witnessed By

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.

33. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude Longitude NAD 1927 1983
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief
Signature David Stewart Printed Name David Stewart Title Res. Advisor Date 1/30/13
E-mail Address david_stewart@oxy.com

pmw

Submit 1 Copy To Appropriate District Office
 District I - (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II - (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III - (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV - (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised August 1, 2011

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO. 30-015-29233
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Harron 15:
8. Well Number 3
9. OGRID Number 16696
10. Pool name or Wildcat (96100) Cedar Canyon SWD: DeKawue

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well Gas Well Other SWD-1326

2. Name of Operator
OXY USA Inc. (5/10/12)

3. Address of Operator
P.O. Box 50250 Midland, TX 79710

4. Well Location
 Unit Letter H : 1657 feet from the north line and 330 feet from the east line
 Section 15 Township 24S Range 29E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
2937' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
DOWNHOLE COMMINGLE <input type="checkbox"/>	P AND A <input type="checkbox"/>
	CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: <u>Convert to SWD, Run MIT</u> <input checked="" type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

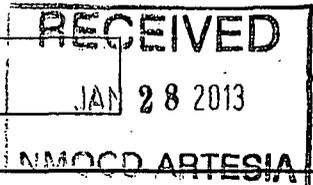
RUPU 8/13/12, RUPU, NDWH, NUBOP, RIH & tag @ 3374', drill out cmt/CIBP, clean out to 5050', POOH. Circ hole w/ 10# MLF, RIH to 4600', spot 25sx CL C, PUH, WOC. RIH & tag cmt @ 4365', POOH. RIH & set CIBP @ 4065', spot 15sx CL C cmt, PUH, WOC. RIH & tag cmt @ 3960'. Perf 6 SPF 3765-3509, 3417-3041. Total 840 holes. Frac w/ 21041g Water Frac GR-21 + 10000g 15% NeFe Acid + 173630g Delta Frac R-21 + 84238g Delta Frac R-16 w/ 604720# sand, RD Halliburton. Swab and flow back to clean up well. RIH w/ 2-7/8" tbg and pkr, set @ 2990'. RDPU 9/21/12. 9/28/12, run MIT, test to 610#. Put well on continuous Injection 12/17/12 @ 858 BWPD @ 415#.

Spud Date:

[Empty box for Spud Date]

Rig Release Date:

[Empty box for Rig Release Date]



I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

David Stewart

TITLE Regulatory Advisor

DATE 1/29/13

Type or print name
 For State Use Only

David Stewart

E-mail address: david_stewart@oxy.com

PHONE: 432-685-5717

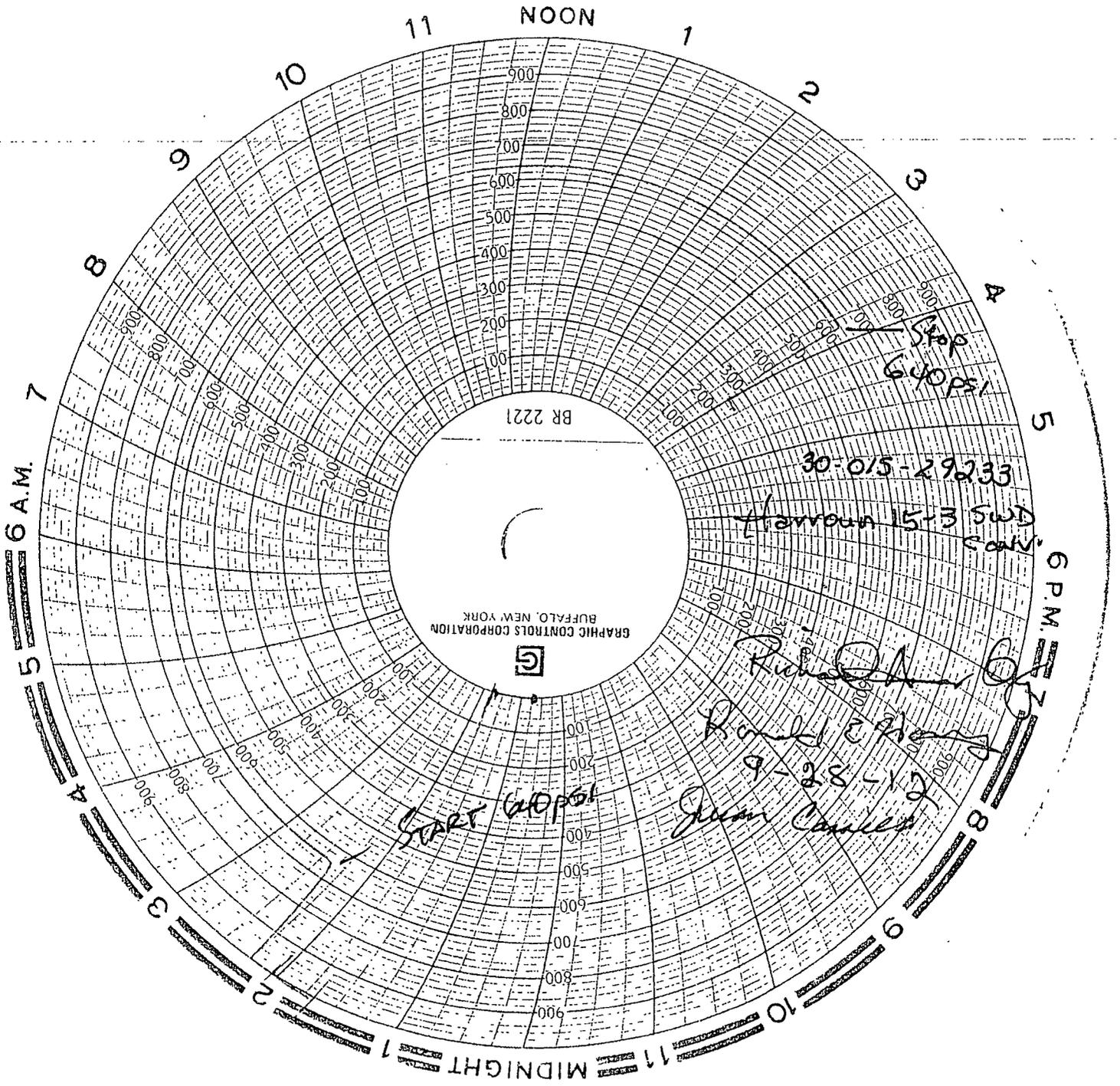
APPROVED BY:

Paulino / mca

TITLE Compliance Officer

DATE 1/29/13

Conditions of Approval (if any):



BR 2221

30-015-29233

Harroun 15-3 SWD
CAN

Stop
640 PSI

START 640 PSI

Richard A. [Signature]

Ronald E. [Signature]

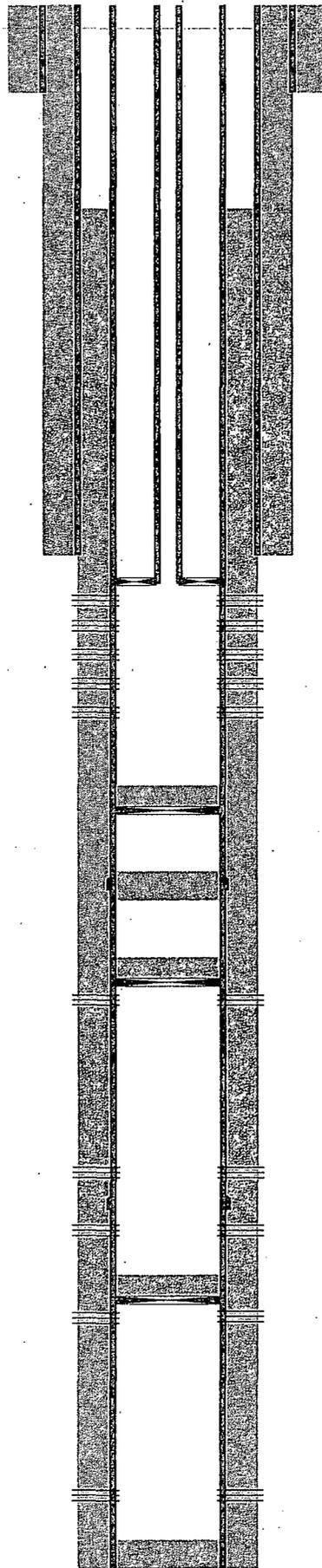
9-28-12

Jim [Signature]

GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK



OXY USA Inc. - Current
Harroun 15 #3
API No. 30-015-29233



14-3/4" hole @ 504'
10-3/4" csg @ 504'
w/ 575sx-TOC-Surf-Circ

2-7/8" tbg & pkr @ 2990'

9-7/8" hole @ 2900'
7-5/8" csg @ 2900'
w/ 800sx-TOC-Surf-Circ

Perfs @ 3041-3765'

8/12-CIBP @ 4065' w/ 15sx cmt to 3965'
WOC-Tagged

8/12-25sx @ 4600-4365' WOC-Tagged

2/10-CIBP @ 5086' w/ 35' cmt-5051'

5/04-Perfs @ 5136-5154'

5/04-Perfs @ 6044-6086'

5/04-Perfs @ 6482-6505'

4/04-CIBP @ 6755' w/ 35' cmt

6-3/4" hole @ 8056'
10/03-Perfs @ 4-1/2" csg @ 8056'
6822-6840' DVT @ 6226', 4511'
1st w/ 375sx-TOC-6221'-Circ
2nd w/ 386sx-TOC-4506'-Circ
3rd w/ 570sx-TOC-1280'-CBL

Perfs @ 7830-7856'

PB-7970'

TD-8056'

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



Administrative Order SWD-1326
May 10, 2012

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of 19.15.26.8B NMAC, OXY USA, Inc. seeks an administrative order to utilize its Harroun 15 Well No. 3 (API 30-015-29233) located 1657 feet from the North line and 330 feet from the East line, Unit letter H of Section 15, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, OXY USA, Inc., is hereby authorized to utilize its Harroun 15 Well No. 3 (API 30-015-29233) located 1657 feet from the North line and 330 feet from the East line, Unit letter H of Section 15, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico, for disposal of oil field produced water (UIC Class II only) into the Bell Canyon member of the Delaware Mountain Group through perforations from 3041 feet to 3765 feet through lined tubing and a packer set less than 100 feet above the permitted disposal interval.

Within six months of commencing disposal, the operator shall ensure the cement top is raised to adequately cover the equivalent disposal interval and protect the bradenhead of the H B 10-A Federal Well No. 8 (API: 30-015-29915) located in Unit letter P of Section 10. If this offsetting well is not repaired or the operator has not obtained alternative written relief from the Division within that time frame, this disposal permit shall expire *ipso-facto*.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only

Handwritten note: "Well File AND 10-A TA 15 will be done" with an arrow pointing to the text above.

the proposed disposal interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC.

The wellhead injection pressure on the well shall be limited to **no more than 608 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO 1004-0135
Expires July 31, 2010

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.

1 Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	8 Well Name and No H B 10A FEDERAL 8
2 Name of Operator DEVON ENERGY PRODUCTION CO Contact DAVID H COOK Email david.cook@dvn.com	9 API Well No 30-015-29915-00-S1
3a Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102	3b Phone No (include area code) Ph. 405-552-7848
4 Location of Well (Footage, Sec., T., R., M.; or Survey Description) Sec 10 T24S R29E SESE 660FSL 400FEL	10 Field and Pool, or Exploratory CEDAR CANYON
	11 County or Parish, and State EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Fracture Treat
	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Well Integrity
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Recomplete
	<input checked="" type="checkbox"/> Other Workover Operations
	<input type="checkbox"/> Change Plans
	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Plug and Abandon
	<input type="checkbox"/> Plug Back
	<input type="checkbox"/> Water Disposal
	<input type="checkbox"/> Convert to Injection

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 site is ready for final inspection.)

Devon Energy Production Company L.P. respectfully requests approval to tie-in cement behind 5 1/2" production csg to the 8 5/8" intermediate csg as proposed in the attached procedure.

Please see attached workover proposal and wellbore schematic.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

RECEIVED
OCT 22 2012
NMOCD ARTESIA

Accepted for record
NMOCD
OCT 17 2012
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct

Electronic Submission #147647 verified by the BLM Well Information System for DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad Office, BLM, on 08/28/2012. Committed to AFMSS for processing by KURT SIMMONS on 09/07/2012 (12XMS012SE)

Name (Printed/Typed) DAVID H COOK	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 08/28/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By EDWARD FERNANDEZ	Title PETROLEUM ENGINEER	Date 10/17/2012
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 Carlsbad		

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.

** BLM REVISED **
SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Cement WORK PLAN



Workover - Raise cement top on 5-1/2" csg

Ron Hays
Engineer
405.552.8150

H B 10A Fed 8
WBS #

Objective - Tie- in Cement behind 5-1/2" production csg to 8-5/8" intermediate casing

API# - 30-015-29915
GL - 2,944 ft
TD - 8,214 ft

Location - Eddy Co.—Sec 10, 24S 29E, 660' FSL, 400' FEL
KB - (13')
PBSD - 8,174 ft

Casing	OD	#s/FT	Grade	Top	Bottom	TOC	80% Collapse (psi)	80% Burst (psi)
Surface	13-3/8"	48.00#	H-40	0'	350'	0'		
Intermediate	8-5/8"	24.00#	K-55	0'	2,933'	0'		2,360
Production	5-1/2"	15.5#	K-55	0' -	6,030'	Est. 3,210'	3,232	3,848
		17#	K-55	6,030' -	8,214'			
Production								
Tubing	2-7/8"	6.4#	N-80	0'	7,408'		8,928	8,456

Capacity 2-7/8" tbg - 0.00579 bbl/ft

Current Rods and Pump (Top down): 2 - 1" rod-subs (?), 79 - 1" rods, 88 - 7/8" rods, 139 - 3/4" rods, 10 - 1" rods, 2' rod lift sub (?) and 2-1/2" X 1-1/4" X 20 X 22 RHBCVVRTS Pump.

Current TBG (Top down): 216 jts - 2-7/8", 6.5#, (grade?) tbg (6,767'), 2-7/8" x 5-1/2" TAC w/ 45K shear (3'), 36 jts - 2-7/8", 6.5# (grade?) tbg (1,124'), 1 - 2-7/8" blast nipple (6'), 1 - 2-7/8" SN (1'), 1 - 2-7/8" perforated sub (4') and 1 - 2-7/8" bull plugged Mud anchor (31.90') TAC @ 6,782'; SN @ 7,912'; EOT @ 7,949'

Current perforations

Bone Spring (Avalon - 2003) 6,871' - 6,891' (20' - 40 holes)
Bone Spring (1998) 7,829' - 7,934' (5' - 6 holes)
7,844' - 7,949' (5' - 6 holes)
7,922' - 7,929' (7' - 8 holes)

Safety: All personnel will wear hard hats, safety glasses with side shields, and steel toed boots while on location. Assess wellhead working height for safety. If needed, use work platform or man-lift for fall protection. H2S monitoring equipment is required by BLM to be on location.

8/16/2012



H B 10A Fed 8
Procedure

- 1) Test anchors. Hot water tubing & rods 2-3 days prior to rig moving in.
- 2) Notify appropriate regulatory agencies prior to starting work.
- 3) MIRU WSU. NU rod rams. Unseat pump & TOH w/ rods & pump. ***Note grade & # of rods. Input into Wellview.
- 4) ND rod rams. NU BOPE. Test BOPE to Devon guidelines.
- 5) Unseat TAC. TOH w/ 2-7/8" tubing & BHA. ***Note number of joints of tubing and grade. If tubing or rods still look to have paraffin, make bit & scraper run.
- 6) TIH w/ 5-1/2", 15.5# RBP and 2-7/8" tbg to 4,100' and set RBP. Circ, load and balance hole w/ 2% KCL. Test RBP & 5-1/2" casing to 1,500 psi for 30 min. If ok, dump 4 cu ft sand (-30') of sand on top of RBP. TOH w/ 2-7/8" tbg.
- 7) RU WL w/packoff. Run GR-CCL-CBL from 4,000' to 2,000'. Confirm TOC w/OKC ** see COA*
- 8) RU WL w/ full lubricator. Test lubricator to Devon guidelines. TIH w/ a 1' - 3-1/8" perf gun loaded 4 spf (90 degree phasing) and shoot squeeze holes ABOVE TOP OF CEMENT.
- 9) Open 8-5/8" Intermediate casing valves. Pump 2% KCL down 5-1/2" casing in attempt to circulation between 5-1/2" by 8-5/8" csgs through squeeze holes. Do not exceed 1,500 psi at surface down casing. If unsuccessful, contact OKC engineering to discuss next option(s) with a 5-1/2" packer. If ok proceed. ** see COA*
- 10) TIH with 5-1/2", (15.5# to 17#) cement retainer and 2-7/8" tbg to - 50' above squeeze holes and set retainer (hydro test 2-7/8" tubing to 8,000 psi below slips while TIH).
- 11) Sting in and out of cement retainer to make sure it is working properly.
- 12) RU pumping services. Test lines. Sting into cement retainer. Pump 2% KCL to determine if circulation can be achieved (below retainer) into squeeze perfs (top pressure 1,500 psi at surface). If circ is achieved, pump @ minimum - 100 bbls of 2% KCL once circulation is established. Sting out of retainer.



H B 10A Fed 8
Procedure cont.

- 13)RU BHI cementing services (proposal # 690851024B) or equivalent. Test lines. Sting into retainer.
 - a. Establish circ & pump 20 bbls fresh water ahead
 - b. Mix & pump - 375 sks 60:40 Poz Class C cement (catch surface samples of cmt).
 - c. Flush 2-7/8" tbg w/ fresh water. Leave at minimum, 1 bbl cement in tbg prior to stinging out of retainer.
 - d. Sting out of retainer and pick up 2-7/8" tbg 2' and reverse circ clean with a minimum 1-1/2 time tubing capacity with 2% KCL or until clean. Report any/all cement returns volumes noted.
 - e. TOH with 2-7/8" tbg and cement stinging tool (remove stinging tool)
 - f. RD BHI or equivalent cementing services
 - g. Run kill string and SWI a minimum of 24 hrs (check surface samples for hardness)
- 14)RU WL w/ packoff. Run GR-CCL-CBL Log from top of retainer to 200' above TOC. If Cement is not tied back to the Intermediate casing contact OKC engineering. If ok, proceed. ** See COA*
- 15)TIH with 4-3/4" bit, bit sub, (4-6) 3-1/2" drill collars, x/o and 2-7/8". Drill out cement retainer and cement. Drop down and wash out - 10' of sand and circulate clean.
- 16)Test 5-1/2" casing and squeeze holes to 1,000 psi. If ok, proceed. If not, contact OKC engineering. ** See COA*
- 17)TOH and lay down drill collars & bit.
- 18)TIH w/ RBP retrieving tool. Wash out remaining - 20' sand and circulate RBP clean.
- 19)Retrieve RBP and TOH with 2-7/8" tbg and RBP.
- 20)TIH w/ original BHA and rod design. Test downhole pump.
- 21)RDMO WSU and return all rentals.
- 22) Turn well over to production.

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: H B 10A Fed. No. 8		Field: Cedar Canyon	
Location: Sec. 10, T-24S, R-29E		County: Eddy Co.	State: New Mexico
Elevation: 2,944		Spud Date: 12/3/97	Compl Date: 1/6/98
API#: 30-015-29915	Prepared by: Ron Hays	Date: 8/16/12	Rev:

CURRENT WELLBORE SCHEMAT

17-1/2 inch hole
350' --- 13-3/8" | 48 lb/ft | H-40

11 inch hole
2,933' --- 8-5/8" | 24 & 32 lb/ft | K-55

3,210' --- Estimated TOC →

6774' = Bone Spring ←

Bone Spring (Avalon - 2003)
6,871' - 6,891' -- 40 holes

Bone Spring - 1998
7,829' - 7,934' -- 6 holes
7,844' - 7,849' -- 6 holes
7,922' - 7,929' -- 8 holes

7-7/8 inch hole
8,214' --- 5-1/2", 15.5 lb/ft, K-55 (0' - 6,030')
17 lb/ft, K-55 (6,030' - 8,214')

2998' - Delaware

3041'
↓
3765'

216 JTS 2-7/8", 6.5#, N-80

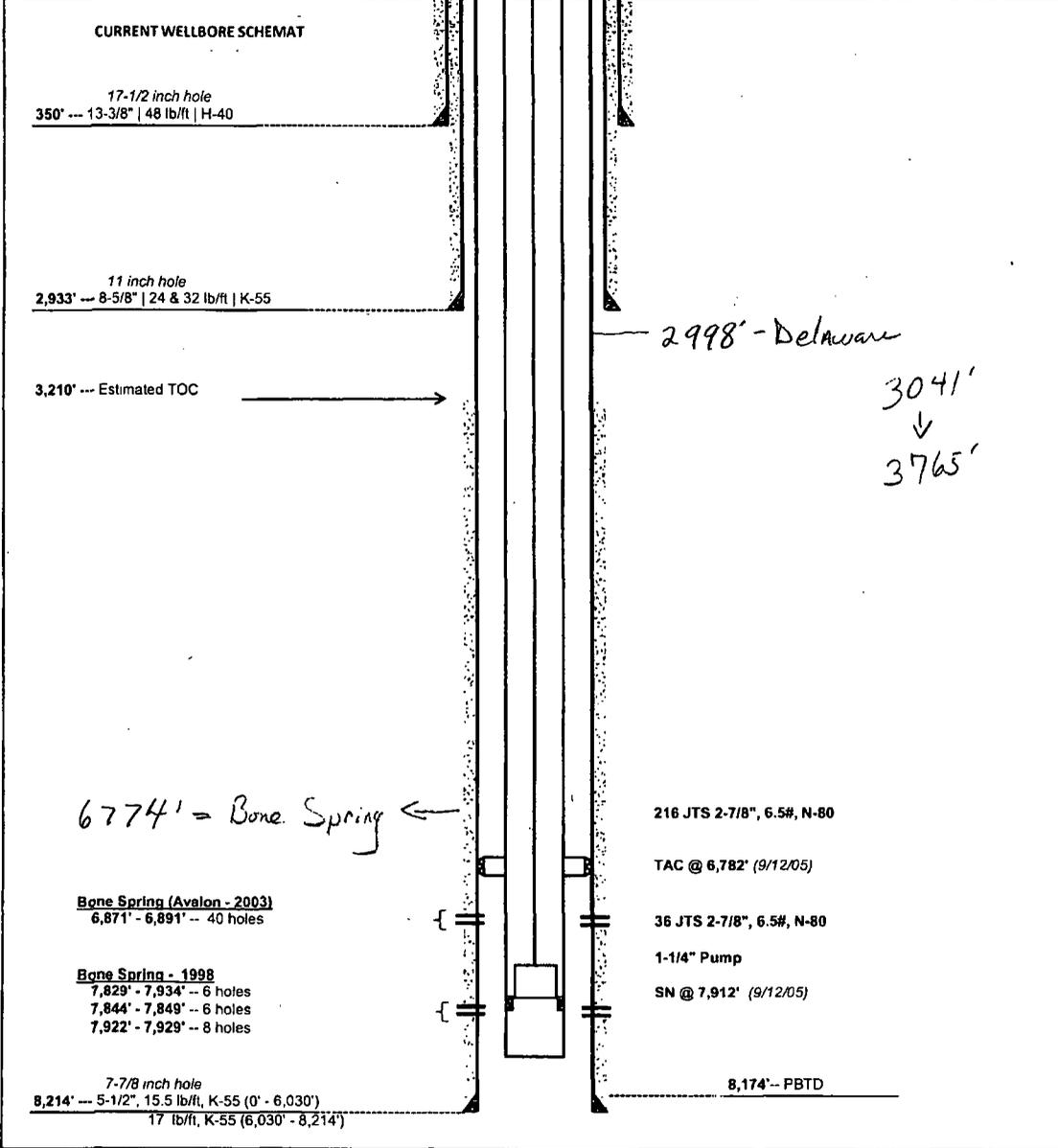
TAC @ 6,782' (9/12/05)

36 JTS 2-7/8", 6.5#, N-80

1-1/4" Pump

SN @ 7,912' (9/12/05)

8,174' -- PBTD



Conditions of Approval

Sundry dated 08/28/2012

H B 10A Federal #8

30-015-29915

Devon Energy Production

1. Surface disturbance beyond the originally approved pad must have prior approval.
2. Closed loop system required.
3. 2000 (2M) 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 (2M 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.
4. Step 9 of operator's proposal – Also contact BLM if unsuccessful
5. Step 14 of operator's proposal – Also contact BLM if cement does not tie back.
6. Step 16 of operator's proposal – as stated Pressure test casing to 1,000 psi. Hold for 15min on a chart recorder and submit Chart recorder to BLM
7. Operator to submit copy of CBL before cement work is done and a copy of CBL after work is done.
8. Work to be completed in 90 days
9. Subsequent sundry describing work done required

EGF 101712