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WELLNAME: HarrisonB15DHC

API #: 30-025-32496

CHEVNO: QY2615

OPERATOR: Chevron

LOCATION: 0

SPUD: 6/13/1994

COMPLETED: 8/1/1994

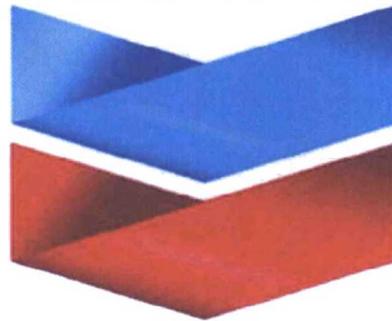
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MAY 08 2018

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**Chevron USA Inc.
Mid-Continent Business Unit**

Chevron



WORKOVER PROCEDURE

HarrisonB15DHC - Recomplete to Grayburg

TBD

Title	Name	Signature
Workover TTL	Kyle Olree	<i>Kyle Olree</i>
WO Superintendent	Scott Miller 04/09/2018	Scott A Miller
Workover Engineer	Doug Blaskowsky 04/05/2018	<i>Douglas W Blaskowsky</i>
Production Engineer	Ashlyn Karchner	

Wellsafe Certified:	Yes	No
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Background: Plugback the Tubb/Drinkard/Abo and re-complete into the Grayburg.

It is up to the WSM, Workover Engineer and Production Engineer to make the decisions necessary to safely do what is best for the well.

Contacts:	Doug Blaskowsky	Workover Engineer	281-731-8076
	Scott Miller	Workover Superintendent	432-687-7990
	Ashlyn Karchner	Production Engineer	432-687-7801

WellSafe Procedure Required: No.

Short Procedure: Refer to the MMWW standard procedure for requirements and general procedure for job. Also, utilize the fields specific Well Planning Tool for field best practices.

1. MIRU workover rig and equipment. Uncover casing valves. Check pressure on all casing strings (including bradenhead). **Record tubing and casing pressures every day on the WellView report.**
Verify whether tubing head is 3K or 5K.

2. Bleed off pressure. Kill well with 10 ppg or less KMW if necessary.

NOTE: Unless there is a well control event do not pump heavier than 10 ppg KWF. Confirm with workover engineer and superintendent that well is WellSafe certified prior to pumping mud.

3. **N/U Rod BOP (WSEA 8A).** POOH with rods and pump. Visually inspect rods for wear, scale, and paraffin while pulling out of the hole with rods. Replace any failed equipment. Report condition to ALCR and workover engineer.
4. **Set BPV in hanger (WSEA 10A),** if possible. N/D tree. Inspect integrity of wellhead to determine if future replacement necessary. **N/U BOP with blind rams on top and 2-3/8" pipe rams on bottom (WSEA 8B).** Pull BPV. Close pipe rams and test BOPE to 250 psi low/500 psi high.

NOTE: If BPV cannot be set, the well must be monitored for flow for 15 minutes or longer before installing BOP.

5. Caliper elevators and document in WellView. Attempt to unset TAC with right-hand rotation; **if unsuccessful, communicate with workover engineer.** TOOH scanning the production tubing, laying down all non-yellow band tubing. See WBD-current tab for details.

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6. P/U 7" CIBP and TIH and set @ +/- 6,100'. If necessary, PU on top additional 2-3/8" workstring. Spot 100' of cement on top of CIBP for a new PBTD of 6,000'. **Pressure test CIBP/cement to the higher of either MASP or 500 psi for 15 minutes (WSEA 10B)**. TOOH with workstring L/D. R/D floor and tubing handling equipment. Prep for CBL.
7. MIRU E-line and lubricator. Test lubricator to 500 psi for 5 minutes. P/U GR/CBL and RIH to PBTD of 5,900'. Run GR/CBL from PBTD to surface. Report TOC to workover engineer. **TOC will need to be of sufficient height above proposed perforating interval to continue on with frac job.**
8. If necessary to change out wellhead, P/U 7" RBP and TIH to 1000' and set. **Pressure test RBP to the higher of either MASP or 500 psi for 15 minutes (WSEA 10C)**. TOOH. Prep for wellhead work.
9. If necessary to change out wellhead, N/D BOP. Remove 3K tubing head. N/U 11" 3M X 7-1/16" 5M tubing head. **Test void to 2400 psi for 15 minutes (WSEA 10D)**.
10. If necessary to change out wellhead, N/U BOP with 2-3/8" pipe rams on top of blind rams. Test break to 250 psi low/500 psi high. R/U floor and tubing handling equipment. Caliper elevators and document in WellView. TIH and retrieve RBP at 1000'. **Pressure test casing to higher of either MASP or 500 psi for 30 minutes (WSEA 6A)**. TOOH with workstring. R/D floor and tubing handling equipment. Prep for perforating/frac.
11. MIRU E-line and lubricator. Test lubricator to 500 psi for 5 minutes per trip. P/U GR/3-1/8" guns loaded 4 SPF 120 degree phasing with large diameter deep penetrating shots. Perforate proposed Grayburg Intervals. See proposed perforations tab for proposed intervals. RDMO with e-line and auxiliary equipment. Correlate to CBL ran in Step 7.
12. Replace 2-3/8" pipe rams with 3-1/2" pipe rams. Test to 250 psi low and 500 psi high for 5 minutes.
13. PU packer on minimally rated 3-1/2" 9.2# L80 8rd frac string. It is permissible to use a readily available higher rated workstring and/or connection. TIH testing frac string internally to 6000 psi. Set packer at 3500'. Test backside to 500 psi for 15 minutes.
14. MIRU frac equipment. Frac well per Cudd frac design (Attachment tab for details). RDMO with frac equipment. **Utilize section 16.2.4 of the MMWW standard procedure for specific hydraulic fracturing requirements.**
15. **Unset packer and POH LD 3-1/2" frac string.**
16. Replace 3-1/2" pipe rams with 2-3/8" pipe rams. Test to 250 psi low and 500 psi high for 5 minutes.

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17. R/U floor and tubing handling equipment. Caliper elevators and document in WellView. P/U 6-1/8" bit and make cleanout run to PBTD at 5,900'.
NOTE: **Stay in contact with workover engineer on progress of C/O.**
TOOH L/D bit.
18. P/U production BHA and TIH. PU new tubing on top as needed. Consult with ALCR on BHA wanted. Setting depth will be based on conditions of the well. See attachments tab for details. Drop standing valve and test tubing to 500 psi for 30 minutes. Retrieve standing valve.

NOTE: Determine TAC setting rotation direction (normally sets with left-hand rotation), and while TIH turn the tubing string the OPPOSITE direction 3 times every 1000' to prevent premature setting and wear to the drag slips. Determine tension setting value with ALCR. Shear value should NOT exceed 80% of the tubing tensile string weight.

19. **Set BPV (WSEA 10H).** N/D BOP. **N/U Tree and test void to 500 psi for 15 minutes (WSEA 10I).** Pull BPV.

NOTE: If BPV cannot be set, the well must be monitored for flow for 15 minutes or longer before installing production tree.

20. **N/U Rod BOP (WSEA 8C).** P/U and RIH with rods per ALCR's design. **Test stuffing box to 500 psi for 15 minutes (WSEA 10J).**
21. Notify production personal in field office and contact pumper that well is ready for pumping. Complete Ownership Transfer Document from D&C to Operations. RDMO workover rig and equipment. **ENSURE LOCATION IS CLEAN.**

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WELL PLAN

Objective:

Well Background:

- Bullet Points of Procedure:
- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10
 - 11
 - 12
 - 13
 - 14
 - 15

Current Zone:

Last Prod Date & Volumes:

Current Zone BHP:

Current Perforations:

Planned Zone:

Planned Zone BHP:

Planned Perforations:

Forecasted Production:

Directions:

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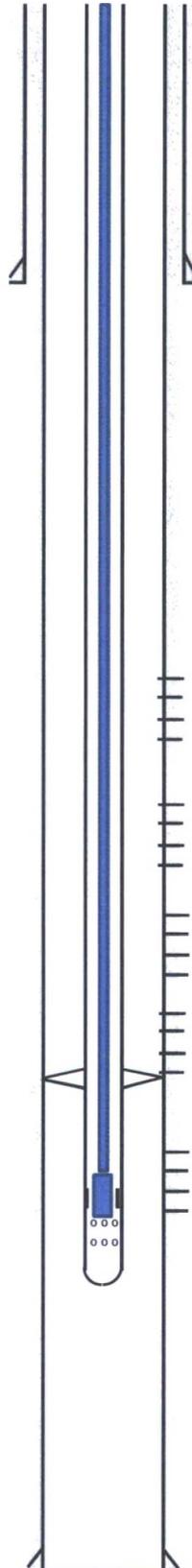
Field: D-K

Reservoir: Abo/Drinkard/Tubb

Location:
 500' FSL & 500' FEL
 Section: 05
 Township: 23S
 Range: 37E
 County: Lea State: NM

Elevations:
 GL: 3326'
 KB:
 DF:

Current Wellbore Diagram



Well ID Info:
 Chevno: QY2615
 API No: 30-025-32496
 L5/L6:
 Spud Date: 6/13/94
 Compl. Date: 8/1/94

Surface Csg: 9 5/8", 36#, K-55
 Set: @ 1180' w/ 400 sks Circ. 158
 Hole Size: 12 1/4"
 Circ: Yes TOC: Surface
 TOC By: Circulated

Tubing Strings

Tubing - Production set at 7,196.6ROTH on 1/18/2012 17:00

Run Date	Job	CC (ft)	WV (in)	Grade	String Length
1/18/2012					7,196.62
	Tubing 2-3/8	182	2 3/8	4.70	J-55
	TAC 7" X 2-3/8" (45K shear)		5 1/4		
	Tubing 2-3/8	32	2 3/8	4.70	J-55
	Tubing 2-3/8" IPC TKsp	2	2 3/8	4.70	J-55
	Landing Nipple	1	2 3/8		
	Rod Anchor (1 1/2-3/8" open ended)	1	2 3/8	4.70	J-55

Rod Strings

86 rod string on 1/19/2012 12:00

Run Date	Job	CC (ft)	WV (in)	Grade	String Length
1/19/2012					7,158.00
	Polished Rod	1	1 1/4		
	Rod Sub	3	7/8		N-37
	Sucker Rod	91	7/8	2.22	Special
	Sucker Rod	199	3/4	1.63	Special
	Sinker Bar	5	1 1/2	6.01	
	Rod Guide	1			
	Rod Insert Pump	1			

Perfs: 6119'-6236' Status: Tubb - Open

Perfs: 6370'-6498' Status: Upper Drinkard - Open

Perfs: 6530'-6588' Status: Lower Drinkard - Open

Perfs: 6641'-6788' Status: Upper Abo - Open

Perfs: 6838'-7100' Status: Lower Abo - Open

Prod. Csg: 7", 26#, J-55
 Set: @ 7800' w/ 2825 sks
 Hole Size: 8 3/4"
 Circ: No TOC: 1500'
 TOC By: Temperature Survey

PBTD: 7612'
 TD: /800'

Updated: 2/9/2018

By: EWRS

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Perf Proposals: Grayburg

Top (md)	Base (md)	Net (ft)	Avg. Porosity	Rt	Rw	Sw	Gas Effect	GR (API)	Additional Comments
3758	3762	4	6%	150	0.1	43%			
3779	3784	5	3%	700	0.1	40%			
3792	3796	4	3%	1000	0.1	33%			
3812	3820	8	7%	1000	0.1	14%			
3838	3846	8	12%	70	0.1	31%			

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Casing/Tubing	Conductor	Surface	Intermediate 1	Intermediate 2	Prod / Liner	Tieback	Tubing
Size, in	None	9.625in 36# K-55	None	None	7in 23# K-55	None	None
Connection	LTC	STC	None	None	LTC	None	None
Depth, ft		1180			7800		
Conn OD, in		Unknown					
ID, in	N/A	0	N/A	N/A	0	N/A	N/A
Drift ID, in	N/A	8.921	N/A	N/A	6.366	N/A	N/A
Collapse, psi	N/A	2020	N/A	N/A	3270	N/A	N/A
Burst, psi	N/A	3520	N/A	N/A	4360	N/A	N/A
Joint Yield, Klbs	N/A	423	N/A	N/A	341	N/A	N/A
Conn Yield, Klbs	N/A	564	N/A	N/A	366	N/A	N/A
Top of Cement, ft		Surface			1500'		
Sxs Cement		400			2825 sx Class H		

*7 in 26# J-55 Casing

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