UIC - I - __8-1___

WDW-1
C-141s

Mewbourne
Well No. 1

Chavez, Carl J, EMNRD

From: Denton, Scott <Scott.Denton@HollyFrontier.com>
Sent: Friday, January 12, 2018 9:08 AM
To: Griswold, Jim, EMNRD
Cc: Chavez, Carl J, EMNRD; Goetze, Phillip, EMNRD; Jones, William V, EMNRD; Sanchez, Daniel J., EMNRD; Dade, Lewis (Randy); Denton, Scott
Subject: DRAFT Navajo WDW-1 Scope and Schedule
Attachments: DRAFT Navajo WDW-1 Workover Schedule from WSP 1-12-18.pdf

Jim,

Attached is the Draft Workover Schedule from our consultant WSP. This is still preliminary as we are working to verify the availability of the Rig, Tubing, Packer and Wellhead. Navajo will likely replace the tubing, packer and wellhead. It's a good opportunity to get new equipment installed.

We expect to have a more definitive start date in the next week. We are also working on reducing this 12-18 day work schedule by working this in 2 shifts rather than 1 shift per day.

Navajo is also diligently working a plan to manage our water during the WDW-1 workover outage. At present we feel we have a solid plan to handle the water during this time.

I am planning to be out the rest of the day, but can be available on my cell phone if you have questions. I am in the office next week and will keep you updated on our progress.

Thanks and have a great weekend.

SMD

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Navajo WDW-1 Workover -- Schedule DRAFT

Task #	Task	Hours	Days	Total Days	Rig Days	Start Date	Actual Date	Possible Scenarios associated with task
1	Prepare a C-103 Sundry Form for the NM OCD regarding the workover and notify NM OCD of start date.	0	0	0	0	TBD	TBD	
2	Prepare well location for workover operations including removing fencing around the wellhead and removing injection pipeline from the wellhead.	0	0	0	0			
3	MIRU workover rig, two frac tanks with 11.0 ppg calcium chloride brine water, pipe racks, and associated equipment.	10	1	1	1	TBD		Waiting to hear back from rig contractors about start dates
4	Place pressure gauge on the wellhead and determine the injection pressure. Pump 325 bbls of 11.0 ppg calcium chloride brine water to kill the well. Surface pressure anticipated to be 910 psig.	2	0.2	1.2	1.2			Will be necessary to fill the annulus with ≈200 bbl of 11 ppg CACl2 brine. May have to perforate tubing to circulate brine. (Add 1 day)
5	Nipple down the wellhead.	2	0.2	1.4	1.4			if studs and nuts are rusted, it may take another 2 to 4 hours to break then out
6	Install 7-1/16-inch, 3K, Blowout Preventor with set of pipe rams for 4-1/2” and for 2-7/8”.	2	0.2	1.6	1.6			
7	Install rig floor, rig up casing handling tools and spear for 4-1/2 inch landing joint.	4	0.4	2	2			

8	Spear into 4-1/2-inch landing joint, release the packer (quarter turn to the right), and pull out landing joint and lay it down.	1	0.1	2.1	2.1			casing hanger may be stuck in the head and require more time to get it out of the head. Releasing the packer may not be this easy
9	Pull 4-1/2-inch injection tubing out of the well and lay it down. Inspect the connection threads for pinholes or deterioration. Inspect body of pipe for pinholes or deterioration.	15	1.5	3.6	3.6			If the tubing has a thick coating of scale, it will be difficult to handle on the ground. 15 hours allowed could be 2 days (add 1/2 day)
10	Inspect injection packer sealing elements.	1	0.1	3.7	3.7			It is possible the tubing is separated and the packer will need to be fished. Fishing tools will require a full day for each fishing run. (1 day)
11	Run casing scrapers (for 7-inch 29 lb/ft, 26 lb/ft casing) on 2-7/8-inch workstring into the well to 7924 feet.	8	0.8	4.5	4.5			
12	Pull up to 7880 ft. Pump into well and circulate out scrapings by pumping bottoms up (285 bbls).	3	0.3	4.8	4.8			
13	Remove casing scraper and workstring.	5	0.5	5.3	5.3			
14	Run casing inspection logs on the 7-5/8-inch and 7-inch protection casing including a MicroVertilog.on the carbon steel casing.	10	1	6.3	6.3			Wireline determination of the depth of fill in the well may indicate the need to run the workstring and circulate out wellbore fill if perforations are covered with fill (2 days)
15	Proceed to running in with test packer on 2-7/8-inch worstring and set at 7900 ft or best place based on casing inspection log.	8	0.8	7.1	7.1			

16	Pressure up the casing to 1650 psig and leave on pressure test over night to allow for thermal stabilization in the wellbore. Retrieve test packer.	12	1.2	8.3	8.3			Test should be left overnight to allow for thermal equalization.
17	If casing pressure test is successful, rig up to run new 7" X 4-1/2" injection packer and 4-1/2" injection tubing into the well.	4	0.4	8.7	8.7			
18	Run 7" X 4-1/2" injection packer and ~197 joints of new 4-1/2", 11.6 lb/ft injection tubing into the well. Pump packer fluid down the 7" X 4-1/2" annulus while running the tubing into the well. Externally pressure test each connection to 1500 psig.	20	2	10.7	10.7			
19	Land the injection tubing into the wellhead.	1	0.1	10.8	10.8			
20	Conduct an annulus pressure test (MIT) at 1650 psig over night to allow for thermal stabilization in the wellbore.	2	0.2	11	11			
21	Conduct an official MIT with NM OCD available to witness at 300 psig for 30 minutes.	1	0.1	11.1	11.1			OCD can require additional logging such as temperature, tracer, or noise log. This will add 1 day.
22	Nipple down the BOP and nipple up the wellhead	2	0.2	11.3	11.3			
23	RDMO the workover rig and equipment.	7	0.7	12	12			
24	Return well to Navajo plant operators.	0	0	12	12			
								Potentially 6 days additional needed.

Chavez, Carl J, EMNRD

From: Denton, Scott <Scott.Denton@HollyFrontier.com>
Sent: Tuesday, January 9, 2018 8:51 AM
To: Griswold, Jim, EMNRD; Chavez, Carl J, EMNRD
Cc: Goetze, Phillip, EMNRD; Jones, William V, EMNRD; Sanchez, Daniel J., EMNRD; Dade, Lewis (Randy); Denton, Scott
Subject: RE: Navajo Refining - UICI-8-1 (WDW-1) Injection Well - - UPDATE

Jim and Team,

I appreciate your taking my calls yesterday and today. As discussed yesterday, we shut the well in to monitor the tubing and annulus pressures overnight.

RESULTS

With the well shut off…

- Tubing Pressure changed from 1,400 psi to 940 psi and this held overnight.
- Annulus Pressure changed from 940 psi to 840 psi and this held overnight.

The Relief Valve (RV) for the annulus fluid did not hold and has a very small leak by. This caused another small spill of less than 1 bbl in the same area as yesterday's spill. We will be working to clean up this area.

Per our conversation this morning, Navajo will continue to operate WDW-1 until we can make repairs. A Repair Plan with Schedule is due to OCD this week.

Please contact me with any questions.

Thanks,

SMD

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From: Griswold, Jim, EMNRD [mailto:Jim.Griswold@state.nm.us]
Sent: Monday, January 08, 2018 3:43 PM
To: Chavez, Carl J, EMNRD
Cc: Goetze, Phillip, EMNRD; Jones, William V, EMNRD; Sanchez, Daniel J., EMNRD; Denton, Scott; Dade, Lewis (Randy)
Subject: FW: Navajo Refining - UICI-8-1 (WDW-1) Injection Well - - UPDATE

Carl,

Phil, Will, and I have spoken with Scott and Randy in this regard. It was decided to terminate injection into WDW-1 temporarily and log the response in both the injection tubing and tubing/casing annulus for the next 12 to 24 hours. Holly will report back to OCD immediately thereafter. They have also been directed to have a plan for future action on the well to the OCD by the end of the week. Come speak with me about this when you get a chance. Thanks.

Jim

From: Denton, Scott [mailto:Scott.Denton@HollyFrontier.com]
Sent: Monday, January 8, 2018 2:36 PM
To: Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Cc: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Dade, Lewis (Randy) <Lewis.Dade@HollyFrontier.com>; Denton, Scott <Scott.Denton@HollyFrontier.com>
Subject: RE: Navajo Refining - UICI-8-1 (WDW-1) Injection Well - - UPDATE

UPDATE

Jim,

I went back to Operations to confirm the Annulus pressure indication and the Well Injection pressure.

- Annulus pressure is still monitored and reading 940 psi.
- Well Injection pressure is 1,400 psi

Let me know if you have any questions.

Thanks,

SMD

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From: Denton, Scott
Sent: Monday, January 08, 2018 11:53 AM
To: Jim Griswold (Jim.Griswold@state.nm.us)
Cc: Carl Chavez (carlj.chavez@state.nm.us); Dade, Lewis (Randy); Denton, Scott
Subject: Navajo Refining - UICI-8-1 (WDW-1) Injection Well

Jim,

Per our discussion this morning, here is what we know currently.

This morning at approximately 8 AM during an inspection of the Navajo UIC wells it was discovered that the Glycol Tank for the WDW-1 Annulus was overflowing. Less than 2 bbls of material were released. Upon discovery, refinery personnel were mobilized to the site.

A vacuum truck has removed the liquid spill and the soil will be collected for disposal.

Please consider my phone call and this e-mail as the required verbal notification under 2.F of our permit. A C-141 will be submitted as required within the next 15 days.

WELL STATUS

The annulus pressure this morning was observed to be approximately 940 lbs. Upon review of our data history the pressure began to increase Friday evening. From 200 lbs to 600 lbs and ultimately 940 lbs over the course of several hours. It has remained at 940 lbs.

The Injection pressure into the well has been and continues to be 939-956 lbs.

The well annulus has been blocked in and the pressure to the tank bled off. While the annulus remains pressured, it is not currently being monitored. We may be able to install a local pressure gauge.

Navajo has contacted our UIC well consultant (WSP-Tim Jones) to initiate a scope of work for repair.

Navajo is requesting guidance on continued operation between now and the initiation of well repairs.

Thanks for your assistance in this matter.

SMD

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