UIC - I - ___9___

C-103s

Submit 1 Copy To Appropriate District Office	State of New Me		Device	Form C-103 ed August 1, 2011
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283	Energy, Minerals and Natu		WELL API NO. 30-045-29002-00	August 1, 2011
811 S. First St., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease	
District III - (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran		STATE FI	Provide State of Stat
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87	/303	6. State Oil & Gas Lease N N/A	0.
SUNDRY NOT (DO NOT USE THIS FORM FOR PROPO	ICES AND REPORTS ON WELLS SALS TO DRILL OR TO DEEPEN OR PLI CATION FOR PERMIT" (FORM C-101) FO	UG BACK TO A	7. Lease Name or Unit Agr Disposal	eement Name
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well 🛛 Other – (Disposal V	Well)	8. Well Number: #001	
2. Name of Operator San Juan Ro	ofining Co. / Western Refining South	1.00	9. OGRID Number: 03721	8
Bloomfield Refinery 3. Address of Operator			10. Pool name or Wildcat:	
# 50 Road 4990, Bloomfield, NM,	87413		Blanco/Mesa Verde	
4. Well Location				1.
	442 feet from the <u>south</u> Township 29 N		250 feet from theEast NMPM County S	line
Section 27	11. Elevation (Show whether DR	and the second s	the second se	an Juan
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Spud Date:	Rig Release D	ate:		
I hereby certify that the information	above is true and complete to the b	pest of my knowled	lge and belief.	
SIGNATURE Most un	hun TITLE B	nvironmental Coor	rdinator DATE 9-3	3-14
Type or print name <u>Matthew K</u> For State Use Only			@wnr.com PHONE: <u>505-63</u>	
APPROVED BY: Conditions of Approval (if any);	Chanes TITLE En	viron menta	1 Engineer DATE 9	13/14

 (DO NOT USE THIS FORM FOR PROPOS, DIFFERENT RESERVOIR. USE "APPLICA PROPOSALS.) 1. Type of Well: Oil Well C. Name of Operator San Juan Refined Refinery 3. Address of Operator # 50 Road 4990, Bloomfield, NM, 8" 4. Well Location 	ATION FOR PERMIT" (FORM C-101) Gas Well Other – (Disposal ning Co. / Western Refining Sou 7413	Atural Resources IN DIVISION Fancis Dr. 87505 LS LUG BACK TO A FOR SUCH Well) Athwest, Inc. –	 Disposal 8. Well Number: 9. OGRID Number 10. Pool name or Blanco/Mesa Vero 	of Lease FEE S Is Lease No. Unit Agreement Name #001 er: 037218 Wildcat:
Unit Letter I : 2442 Section 27	South and South		50 feet from the	eastline
Section 27	Township 29 11. Elevation (Show whether D	Range 11	NMPM	County San Juan
	In Storadon (Show whether D	h, hh, h, h, h, h, h, elc.		
	CHANGE PLANS	COMMENCE DRI CASING/CEMEN	Г ЈОВ	P AND A
proposed completion or recon Western Refining Southwest, Inc. – Bla Class I Injection Well referenced above from OCD.	pomfield Refinery requests perm	ission to perform w	I stimulation / acidiz	nian mana dama d
Spud Date:	Rig Release Da]
I hereby certify that the information abo	ve is true and complete to the be	est of my knowledge	and belief.	
	TITLE En			9/21/2011
Type or print name <u>Kelly Robinson</u> For State Use Only	E-mail address:	kelly.robinson@y	vnr.com PHONE:	505-632-4166
APPROVED BY: <u>Lang</u> , <u>Lang</u> Conditions of Approval (if any):	TITLE Env	inormatel En	giner_DATI	9/22/2011

Western Refining Southwest, Inc. – Bloomfield Refinery

Well Clean-Out and Acid Treatment Field Procedure – September 2011

Well:	Disposal Well #1	Field:	Mesaverde
Location:	Bloomfield Refinery S27, T29N, R11W	API No. :	30-045-29002

PROJECT: Lower injection pressure by pumping 15% HCl acid.

Prior to Job:

A safety meeting will be held for all contractors and facility visitors prior to the start of field activities. Equipment staged on-site for well clean-out and acidizing activities include two 400bbl frac tanks to be used for flow-back after acid job. An additional frac tank may be used for flow-back during well clean out activities. The tanks will be hard-piped to the injection well piping for flow-back. All field piping will be pressured tested at 4,000 psi to ensure no leaks exist on field equipment prior to commencement of field work.

A water truck will be used for fluid displacement. Hydrants at the Bloomfield Refinery have too much pressure for these field activities. A summary of the activities proposed are as follows:

Phase 1: Clean out and Acid Spot

- 1. Rig up the coil tubing unit & Halliburton to well head and conduct pressure test on pumps and lines.
- 2. RIH with 1-14-inch coil tubing to PBTD at 3520 ft. Clean out if necessary.
- 3. Pull coiled tubing up to bottom perforation at 3,460 ft KB (bottom perforation) to ensure acid placement is at the perforations.
- 4. Pump 200 gallons of 15% HCL with inhibitors into well.
- 5. Pull out coiled tubing and shut well in overnight.

Phase 2: Acid / Ball Off

- Establish an injection rate with water. Pump 4,200 gallons of 15% HCl acid w/ inihibtors and mutual solvent with 300 ea. bio-degradable ball sealers. Pump initial 500-gallons without balls.
- Displace acid to bottom perforation with ~ 24 bbls of 2% KCl water (or disposal water if available).
- Shut well in for ~ 1 hr and let acid treatment "soak".
- Open well through 2-inch line and let well flow back to frac tank. Flow back approximately 400 bbls of fluid.
- After flowback, return well to injection status and monitor rates and pressures.

Materials & Vendors

Acid: Halliburton Energy Services Coll Tubing: Basic Energy Services WESTERN REFINING DISPOSAL WELL #1 NW, SW SECTION 26, T29N, R11W

NO.: 30-045-29002

SUBS	SURFA	GE HOUSTON, TX SOUTH BEND, I BATON ROUGE			•	
D	We	FIGURE 1 WELL #1 WELI Istern Refining Bloomfield, NN	Inc.	EMATIC	•	
Date:	4/26/2006	Approved By:	rts	Job No.:	70F5830	
Orawn By:	ris	Checked By:		Scale:	N/A	

8-5/8", 48#/ft, Surface Casing @ 830' TOC: Surface Hole Size: 11.0"

Tubing: 2-7/8", Acid Resistant Fluoroline Cement Lined Wt of Tubing: 6.5 #/ft

Wt of Tubing Lined: 7.55 #/ft

Tubing ID: 2.128"

Tubing Drift ID: 2.000" Minimum ID @ Packer: ~1.87" estimated

Packer: Unknown Packer Type @ 3221' Could be a Guiberson or similar model Uni-6

Perforations: 3276' - 3408' 4JSPF 0.5 EHD Top of the Cliff House Formation: 3276'

Fill was cleaned out of well on 4/20/06 Fill was orginally tagged at 3325'

Perforations: 3435' - 3460' 4JSPF 0.5 EHD. Top of the Menefee Formation: 3400'

RBP: 3520'

5-1/2", 15.5#/ft, Production Casing @3600' TOC: Surface Hole Size: 7-7/8"

Submit 1 Copy To Appropriate District Office			
	State of New Me		Form C-103
District I (575) 393-6161	Energy, Minerals and Nati	ural Resources	Revised August 1, 2011
1625 N. French Dr., Hobbs, NM 88240 <u>District Π</u> – (575) 748-1283			WELL API NO. 30-045-29002-00
811 S. First St., Artesia, NM 88210	OIL CONSERVATION	J DIVISION	5. Indicate Type of Lease
<u>District III</u> - (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fra	ncis Dr.	STATE STATE STATE
$\frac{District IV}{D} = (505) 476-3460$	Santa Fe, NM 8	7505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505			N/A
	S AND REPORTS ON WELLS	<u> </u>	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOSAL DIFFERENT RESERVOIR. USE *APPLICAT PROPOSALS.)	S TO DRILL OR TO DEEPEN OR PL	UG BACK TO A	Disposal
1. Type of Well: Oil Well 🔲 Ga			8. Well Number: #001
2. Name of Operator San Juan Refin Bloomfield Refinery	ing Co. / Western Refining Sout	hwest, Inc. –	9. OGRID Number: 037218
3. Address of Operator			10. Pool name or Wildcat:
# 50 Road 4990, Bloomfield, NM, 874	413		Blanco/Mesa Verde
4. Well Location			
Unit Letter1_:2442		·······	50 feet from theeastline
Section 27		ange []	NMPM County San Juan
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12. Check App	propriate Box to Indicate N	ature of Notice,	Report or Other Data
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		REMEDIAL WOR	
	CHANGE PLANS		ILLING OPNS. P AND A
		CASING/CEMEN	—
		,	
OTHER: Well Stimulation / Acidize W	/ell	OTHER:	·· П
13. Describe proposed or complete	d operations. (Clearly state all)	pertinent details, an	d give pertinent dates, including estimated dat
of starting any proposed work) proposed completion or recom		J. For Multiple Co	mpletions: Attach wellbore diagram of
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Western Refining Southwest, Inc. – Bloomfield Refinery

Well Clean-Out and Acid Treatment Field Procedure – September 2011

Well:	Disposal Well #1	Field:	Mesaverde
Location:	Bloomfield Refinery S27, T29N, R11W	API No. :	30 - 045-29002

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A water truck will be used for fluid displacement. Hydrants at the Bloomfield Refinery have too much pressure for these field activities. A summary of the activities proposed are as follows:

Phase 1: Clean out and Acid Spot

- 1. Rig up the Sanjel coil tubing unit & Halliburton to well head and conduct press test on pumps and lines.
- 2. RIH with 1-1/4-inch coil tubing to PBTD at 3520 ft. Clean out if necessary.
- 3. Pull coiled tubing up to bottom perforation at 3,460 ft KB (bottom perforation) to ensure acid placement is at the perforations.
- 4. Pump 200 gallons of 15% HCL with inhibitors into well
- 5. Pull out coiled tubing and shut well in overnight.

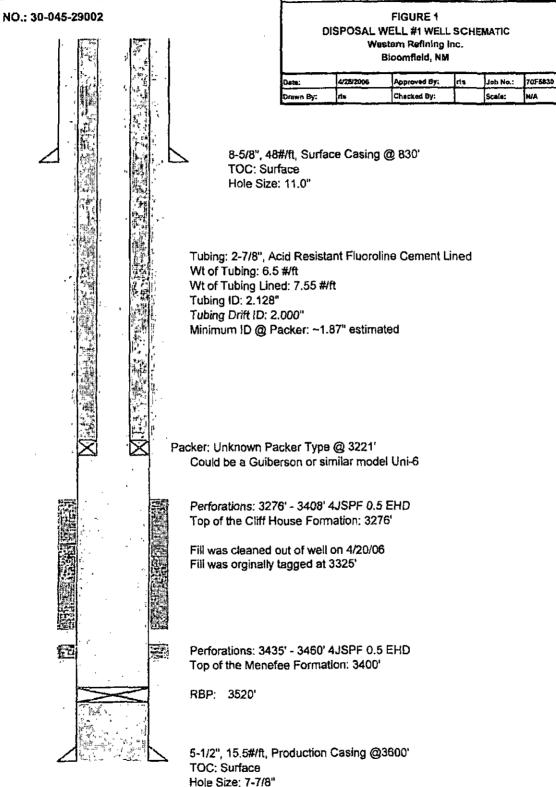
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- Establish an injection rate with water. Pump 4,200 gallons of 15% HCl acid w/ inihibtors and mutual solvent with 300 ea. bio-degradable ball sealers. Pump initial 500-gallons without balls.
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- After flowback, return well to injection status and monitor rates and pressures.

Materials & Vendors

Acid: Halliburton Energy Services Coll Tubing: Sanjel

WESTERN REFINING DISPOSAL WELL #1 NW, SW SECTION 26, T29N, R11W



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Subsurface

HOLISTON, TX SOUTH BEND, IN BATON ROUGE, LA





RECEIVED OCD 2010 AUG 24 P 1: 06

Carl Chavez New Mexico Oil Conservation Division Environmental Bureau 1220 South St. Francis Dr Santa Fe, NM 87505

Certified Mail: 7007 0220 0004 0187 1463

August 20, 2010

RE: Western Refining Southwest, Inc. – Bloomfield Refinery Fall-Off Test 2010 Class I Non-Hazardous Injection Well UICL-9

Mr. Chavez,

Please find enclosed the C-103 application for Bloomfield Refinery's 2010 Fall-Off Test for the Class I Non-Hazardous Injection Well UICL-9. Also included is the Fall-Off Test Plan incorporating your request to install bottom hole gauges at 48 hours before cessation of injection and the Wellbore Diagram.

If you have questions or concerns regarding the 2010 Fall-Off Test Plan, please contact either Randy Schmaltz (505-632-4171) or Cindy Hurtado (505-632-4161).

Sincerely,

James R. Schmaltz Environmental Manager Western Refining Southwest, Inc. - Bloomfield Refinery

Submit 3 Copies To Appropriate District Office	State of New Me Energy, Minerals and Natu		Form C-103 May 27, 2004
<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II			WELL API NO. 30-045-29002-00
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease
<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran		STATE FEE X
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM	Santa Fe, NM 87	303	6. State Oil & Gas Lease No. N/A
87505 SUNDRY NOTIC	CES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLIC. PROPOSALS.)	ALS TO DRILL OR TO DEEPEN OR PLU	JG BACK TO A	Disposal
1. Type of Well: Oil Well	Gas Well 🗌 OtherX (Disposal)		8. Well Number #001
2. Name of Operator Western Refining Southwest, Inc. –	Bloomfeld Refinery		9. OGRID Number 037218
3. Address of Operator #50 Road 4990 Bloomfield, NM 8	37413		10. Pool name or Wildcat Blanco/Mesa Verde
4. Well Location			
Unit Letter_1 : 2442fe Section 27	tet from the South l Township 29 Range	ine and1250_fee	
	11. Elevation <i>(Show whether DR</i> ,		,
Pit or Below-grade Tank Application 🗌 or	Closure		
Pit typeDepth to Groundwa	terDistance from nearest fresh w	ater well Dist	ance from nearest surface water
Pit Liner Thickness: mil	Below-Grade Tank: Volume	bbls; Co	nstruction Material
12. Check A	ppropriate Box to Indicate N	ature of Notice,	Report or Other Data
NOTICE OF IN PERFORM REMEDIAL WORK TEMPORARILY ABANDON	TENTION TO: PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPL	SUB REMEDIAL WOR COMMENCE DRI CASING/CEMEN	
OTHER: Annual Fall-Off Test X⊡		OTHER:	
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			d give pertinent dates, including estimated date tach wellbore diagram of proposed completion
Bloomfield Refinery requests permise injection buildup period will begin or be lowered into the well (two memory	sion to perform the annual Fall-Off a August 29, 2010. After 24 hours of y gauges) and allowed to stabilize f	Test on the Class I of stable injection th for 48 hours. The w	injection well referenced above. The ne bottom hole pressure memory gauges will yell will be shut-in for at least 72 hours.
I hereby certify that the information a	bove is true and complete to the be	est of my knowledg	e and belief. I further certify that any pit or below- or an (attached) alternative OCD-approved plan .
(1.14)	1 /		
SIGNATURE (Indy / Yun	TADOTITLE_E	Environmental Coor	dinatorDATE8/20/2010
Type or print name Cindy Hurtado For State Use Only	E-mail address: cindy.hur	tado@wnr.com	Telephone No. (505)632-4161
APPROVED BY:	TITLE	<u></u>	DATE

Conditions of Approval (if any):

stern de Le Tresterne

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2010 WELL BUILDUP/FALLOFF TEST PLAN WESTERN REFINERY BLOOMFIELD, NM WASTE DISPOSAL WELL NO. 1

General Test Operational Consideration

The falloff testing for Western's Waste Disposal Well No. 1 (WDW-1) will be conducted with tandem bottom hole pressure memory gauges. After 24 hours of stable injection the bottom hole pressure memory gauges will be lowered into the well (two memory gauges) and allowed to stabilize for 48 hours. The well will be shut-in for at least 72 hours and the affect of any offset wells will be considered. Before performing the fall-off testing a one mile area of review (AOR) will be conducted to determine the status of any offset wells that may be injecting into or producing from the WDW-1 injection interval. If any are found arrangements will be made with the owners of the wells to monitor those wells during the build-up/fall-off procedure. At the end of the fall-off test, the bottom hole pressure gauges will be pulled from the well making gradient stops every 1000 feet.

The injection buildup period will consist of no less than 72 hours at a constant rate and the pressure fall-off will be maintained for no less than 72 hours. The 72 hour build-up/fall-off period was established when a fall-off test procedure was performed in July, 2006 and is backed by historical data. WDW-1 injects into the Menefee and Cliff House formations. In April, 2006 a build-up/fall-off test was performed after a well cleanout and acid stimulation. The buildup/falloff test produced measurable results with all flow skin, storage and linear flow regimes present. Radial flow was not observed. The flow regimes during previous tests on this well included storage, skin, and infinite acting linear flow. Because of the low permeability of the injection interval, testing was not of sufficient length to establish radial flow.

The WDW-1 is in a confined low permeability sand interval and historically is not capable of producing a bottom hole 100 psi differential pressure drop between the final injection and shutin pressures. The logs included in Appendix 2 show tight low porosity injection interval that contains no known commercial hydrocarbons. Records show that WDW-1 was hydraulically fractured after it was drilled. The 2006, 2008 and 2009 fall-off test data confirm this with a linear flow regime observed after the end of storage effects.

The memory gauges that will be used are SP-2000 hybrid-quartz gauges provided by Tefteller, Inc. that will have a resolution of 0.01 psi and an accuracy of $\pm 0.05\%$ of full scale. The pressure range of the gauges will be from 0 - 5,000 psi minimum. These are bottom hole memory gauges. The gauges will be lowered to the top of the injection interval at 3250 feet. The recording period will be set to record pressures at a minimum of every 5 minutes and more frequently during the early part of the fall-off test period.

The fluid that will be used for the injection test is the refinery's brine waste water (effluent). A current waste analysis of the fluid will be included in the final report. A summary of the brine waste water is in Table 2.

A crown valve has been installed on WDW-1. The lubricator will be installed onto the crown valve before running into the wellbore with the memory gauges. The well will be shut-in through two inline gate valves, one located at the wellhead and another located in the pump house. The pump house is located about 30 feet from the wellhead.

Background Information

All background information will be included in the final report encompassing a log of the events (Chronology of Field Activity), a over view of the Geology, a current area of review (AOR) update, fall-off analysis including previous injection data (rate and volume history), gauge calibration certificates, bottom hole pressure analysis, well schematic, electric logs, reservoir fluid description, and injection fluid analysis. The procedure to do the fall-off test will also be included in the final report. If necessary an AOR update will be included prior to the build-up/fall-off testing to ascertain the offset injection wells current condition. Historically there has not been any production or injection in the current injection interval within a one mile radius of WDW-1.

Western Refining (formally Giant Refining) conducted a falloff test on WDW-1 using quartz crystal bottom hole memory gauges. The tests followed EPA guidelines and were performed to comply with OCD directives for UIC non-hazardous Class I injection wells. In July of 2006 a build-up/fall-off test was conducted after the well stimulation. The 72 hour build-up portion of the testing was done at a constant injection rate of 70 gallons per minute. The fall-off portion of the testing was terminated after 84 hours. In August 2008, an additional test was conducted with final flowing rate 80 gpm prior to shutting in the well for a fall-off of 189 hours. The WDW-1 had linear flow at the end of these fall-off tests. As a result, the calculated permeability based on radial flow equations are not a reliable estimate of injection zone permeability.

Attachment 1 (Figure 1 from the 2008 fall-off test report) is the well schematic for WDW-1 which is the same as submitted in 2009. Table 1 is a summary of the injection intervals for the well. Table 2 is a summary of the injection fluid analysis. Table 3 is a summary of the formation fluid analysis. A connate water analysis prior to injection was not found in any of the records, therefore the original formation water properties will have to be estimated from offset wells. The majority of the background information can also be found in the permit application that was submitted to the State of New Mexico Oil Conservation Division for the well on September 10, 1992.

Conduct Annulus Pressure Testing

Utilizing the Western monitoring system, an Annulus Pressure Test (APT) will be run at 500 to 600 psi, for a minimum of 30 minutes. Recorded data will be documented in the report.

Conducting the Fall-off Testing

This is the procedure that will be used to perform the fall-off test at Western Refining facility in Bloomfield, NM.

First Three Days

1. Establish a stabilized injection rate (approximately 40 gallons per minute) for a period of three days with plant pumps. The target rate will be designed to be close to the average injection rate from the prior 30 days of operations.

Day Two

- 2. Move in and rig up (MIRU) a slickline unit and run in hole (RIH) with a gauge ring and tag bottom to determine the top of any fill.
- 3. Pull out of the hole (POOH) with gauge ring and RIH with tandem memory gauges to 3250 feet.
- 4. Continue injection into the well for 48 hours to allow the tandem memory gauges to stabilize.
- 5. Shut down injection and isolate the well by closing wing valve on the wellhead and in pump room.
- 6. Monitor the bottom hole pressure fall-off for a minimum of three days and up to eight days.

Day Eleven

- 7. After seven days, POOH with memory tool, making five minute gradient stops at 3250 ft, 3000 ft, 2000 ft, 1000 ft.
- 8. Rig down slick line unit.
- 9. Return well to Western Refining.

Evaluation of the Test Results

The fall-off and other analysis will be completed by a geologist and/or qualified engineer. The Reservoir Engineer will utilize the standard transient pressure analysis methods and the results will be reviewed for accuracy by a licensed professional engineer (PE). The fall-off analysis will include the following;

- A log-log plot with a derivative diagnostic plot used to identify flow regimes.
- A wellbore storage portion and infinite acting portion of the plot.
- A linear flow plot with wellbore storage, P*, and slope.
- An expanded portion of the linear flow plot showing the infinite acting pressure portion (linear flow).
- The height of the injection interval used for the calculations will be 106 feet (average of 27 feet and 185 feet) unless test data indicate a different interval should be used.
- The viscosity of the formation fluid used for the calculations will be based on historical data.
- A summary of all the equations used for the analysis.
- An explanation of any temperature or pressure anomalous.

The injection records one year prior to the testing will be included in the analysis.

Well Data Table 1

	WDW – 1		
Tubing	2.875", 7.55 lb/ft, Fluoroline Cement Lined, 3221'		
Packer	5.5"x 2.875", Guiberson Tools, Uni-6, ID 1.87", 3221'		
Perforations	Top of the Cliff House at 3276' 3276' – 3408', 4SPF 0.5 EHD Top of the Menefee at 3400' 3435' – 3460', 4SPF 0.5 EHD		
Protection Casing	5.5", 15.5 lb/ft, 3600'		
Cement Top Protection Casing	Surface		
PBTD / TD	RBP at 3520', Fill Tagged on 4/20/06 at 3325' & cleaned out		
Formation	Cliff House / Menefee		

Injected Brine Waste Water Table 2			
Chemical	Refinery Waste	Refinery Waste	
Cheffical	Water	Water	
Date	March 10, 1998	Sept 27, 2005	
Arsenic (mg/L)	0.014	-	
Calcium (mg/L)	120	68	
Magnesium (mg/L)	39	33	
Potassium (mg/L)	27	-	
Sodium (mg/L)	920	1659	
Chloride (mg/L)	1200	2200	
Sulfate (mg/L)	400	708	
Alkalinity (CaCO3) (mg/L)	330	100	
pH (s.u.)	7.7	8.0	
Specific Gravity (g/L)	1.00 - 1.01	1.00 - 1.01	

Injected Brine Waste Water Table 2

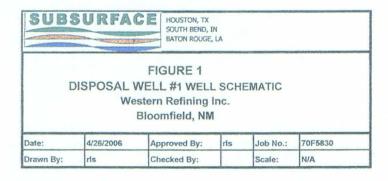
Formation Brine Waste Water Table 3		
Chemical	Formation Water	
Date	May 22, 1995	
Arsenic (mg/L)	0.023	
Cadmium (mg/L)	0.003	
Calcium (mg/L)	375	
Lead (mg/L)	0.063	
Magnesium (mg/L)	99	
Potassium (mg/L)	69	
Selenium (mg/L)	0.006	
Sodium (mg/L)	3610	
Chloride (mg/L)	5370	
Sulfate (mg/L)	1620	
Alkalinity (CaCO3) (mg/L)	306	
pH (s.u.)	8.5	
Specific Gravity (g/L)	-	

Formation Brine Waste Water Table 3

WESTERN REFINING DISPOSAL WELL #1 NW, SW SECTION 26, T29N, R11W

X

NO.: 30-045-29002



8-5/8", 48#/ft, Surface Casing @ 830' TOC: Surface Hole Size: 11.0"

Tubing: 2-7/8", Acid Resistant Fluoroline Cement Lined Wt of Tubing: 6.5 #/ft Wt of Tubing Lined: 7.55 #/ft Tubing ID: 2.128" Tubing Drift ID: 2.000" Minimum ID @ Packer: ~1.87" estimated

Packer: Unknown Packer Type @ 3221' Could be a Guiberson or similar model Uni-6

Perforations: 3276' - 3408' 4JSPF 0.5 EHD Top of the Cliff House Formation: 3276'

Fill was cleaned out of well on 4/20/06 Fill was orginally tagged at 3325'

Perforations: 3435' - 3460' 4JSPF 0.5 EHD Top of the Menefee Formation: 3400'

RBP: 3520'

5-1/2", 15.5#/ft, Production Casing @3600' TOC: Surface Hole Size: 7-7/8"

Submit 3 Copies To Appropriate District	State of New Me Energy, Minerals and Natu		Form C-103 May 27, 2004
<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240	chergy, Minerals and Natu	rai Resources	WELL API NO.
<u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION	DIVISION	30-045-29002-00 5. Indicate Type of Lease
District III 1000 Rio Brazos Rd., Aztee, NM 87410	1220 South St. Fran		STATE FEE X
$\frac{\text{District IV}}{1220 \text{ S. St. Francis Dr., Santa Fe, NM 87410}}$	Santa Fe, NM 87	7505	6. State Oil & Gas Lease No. N/A
	CES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLIC PROPOSALS.)			Disposal
1. Type of Well: Oil Well	Gas Well 🔲 OtherX (Disposal)		8. Well Number #001
2. Name of Operator			9. OGRID Number
Western Refining Southwest, Inc 3. Address of Operator	- Bloomfeld Refinery		037218 . 10. Pool name or Wildcat
#50 Road 4990 Bloomfield, NM	87413		Blanco/Mesa Verde
4. Well Location			
	eet from the South	ine and 1250 fee	t from the East line
Section 27			1 County San Juan
	11. Elevation (Show whether DR.		
Pit or Below-grade Tank Application 🗌 o	r Closure 🔲		
Pit typeDepth to Groundw	aterDistance from nearest fresh w	ater well Dist	ance from nearest surface water
Pit Liner Thickness: mil	Below-Grade Tank: Volume	bbls; Co	nstruction Material
12. Check A	Appropriate Box to Indicate N	ature of Notice,	Report or Other Data
NOTICE OF IN	TENTION TO:	SUB	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK 🗌		REMEDIAL WORK	
	CHANGE PLANS	1	
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMENT	ГЈОВ
OTHER: MIT/BradenheadTest X□		OTHER:	
			I give pertinent dates, including estimated date tach wellbore diagram of proposed completion

Bloomfield Refinery requests permission to perform the annual High Pressure Shutdown Test, Bradenhead Test, and Mechanical Integrity Test on the Class I injection well referenced above on May 19, 2010.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or belowgrade tank has been/yeill be constructed or closed according to NMOCD guidelines 🗌, a general permit 🗍 or an (attached) alternative OCD-approved plan 🗌.

Justado TITLE_ Environmental Coordinator__DATE___5/12/2010___ SIGNATURE indu 1

Type or print name Cindy Hurtado For State Use Only

E-mail address: cindy.hurtado@wnr.com Telephone No. (505)632-4161

APPROVED BY: Carl of Charles TITLE Empirormentant Engr. DATE 5/12/20/0

Chavez, Carl J, EMNRD

From:Hurtado, Cindy [Cindy.Hurtado@wnr.com]Sent:Wednesday, May 12, 2010 9:30 AMTo:Chavez, Carl J, EMNRD; Roberts, Kelly G, EMNRD; Kuehling, Monica, EMNRDCc:Schmaltz, Randy; Robinson, KellyAttachments:C103-MIT-2010.pdf

Good Morning,

Please find attached Bloomfield Refinery's C103 requesting permission to conduct the annual MIT, Bradenhead Test, and the High Pressure Shut Down Test on our Class I injection well (UICI-009) on May 19, 2010. I have coordinated with Monica Kuehling with Aztec OCD and she is available to witness the event between 8-8:30 AM. Monica is current on her safety training at Bloomfield Refinery. However, any other observers will need to contact me in order to arrange for safety orientation before the testing begins.

Thank You, Cindy

Cindy Hurtado Environmental Coordinator Western Refining Southwest, Inc. - Bloomfield Refinery <u>cindy.hurtado@wnr.com</u> 505-632-4161

Chavez, Carl J, EMNRD

From:	Hurtado, Cindy [Cindy.Hurtado@wnr.com]
Sent:	Thursday, September 17, 2009 1:05 PM
То:	Chavez, Carl J, EMNRD; Perrin, Charlie, EMNRD; Schmaltz, Randy
Cc:	Roberts, Kelly G, EMNRD; Kuehling, Monica, EMNRD; Krakow, Bob
Subject:	C-103 Radioactive Tracer Test - MIT
Attachments:	C103 Radioactive Tracer Test - MIT.jpg

Good Afternoon Carl and Charlie,

Please find attached the C-103 notification for the Radioactive Tracer Test and annual MIT/Bradenhead Test on our Class I injection well. I have talked to Monica Kuehling and she is available on the morning of September 24, 2009 to observe the annual High Pressure Shut-Off/Bradenhead Test/MIT.

Please be aware that if any other representatives from OCD want to observe the procedures, Western Refining requires all incoming personnel to undergo safety orientation before entering the plant.

Thanks, Cindy

Cindy Hurtado Environmental Coordinator Western Refining Southwest, Inc. - Bloomfield Refinery <u>cindy.hurtado@wnr.com</u> 505-632-4161

This inbound email has been scanned by the MessageLabs Email Security System.

f Submit 3 Copies To Appropriate District Office	State of New Me.		Form C-103
District 1 1625 N. French Dr., Hobbs, NM \$8240	Energy, Minerals and Natur	ral Resources	May 27, 2004 WELL API NO.
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION	DIVISION	30-045-29002-00
District III 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran		5. Indicate Type of Lease STATE FEE X
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87	505	6. State Oil & Gas Lease No. N/A
(DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC	CES AND REPORTS ON WELLS SALS TO DRILL OR TO DEEPEN OR PLU CATION FOR PERMIT" (FORM C-101) FO	/G BACK TO A	 Lease Name or Unit Agreement Name Disposal
PROPOSALS.)	Gas Well DotherX (Disposal)		8. Well Number #001
	ining Southwest, Inc. – Bloomfeld F	Refinery	9. OGRID Number 037218
3. Address of Operator #50 Road 4990 Bloomfield, NM	87413		 Pool name or Wildcat Blanco/Mesa Verde
4. Well Location			
	feet from the South I		
Section 27	Township 29 Range 11. Elevation (Show whether DR,	11 NMPN	
		<i>KKD</i> , <i>K</i> 1, <i>UK</i> , <i>elc.)</i>	
Pit or Below-grade Tank Application C Pit typeDepth to Groundw		oton woll Dist	and the second surfaces with the
Pit Liner Thickness: mil			nstruction Material
L			······
T2. Check 7	Appropriate Box to Indicate N	ature of motice,	Report of Other Data
NOTICE OF IN PERFORM REMEDIAL WORK TEMPORARILY ABANDON	PLUG AND ABANDON	SUB REMEDIAL WORI COMMENCE DRI CASING/CEMEN	
OTHER: Radioactive Tracer Tes X	/MIT/BadenheadTest	OTHER:	
13. Describe proposed or comp			d give pertinent dates, including estimated date tach wellbore diagram of proposed completion

For the 5-year review of the permit and permit renewal, Western Refining Southwest, Inc. – Bloomfield Refinery requests permission to perform a Radioactive Tracer test to assess the mechanical integrity of the cement behind the casing on the Class I injection well referenced above. Two millicuries of Antimony B124 isotope will be used in the test. A Gamma Ray correlation log will be run. This test is tentatively scheduled for September 23, 2009.

Bloomfield Refinery also requests permission to perform the annual High Pressure Shutdown Test, Bradenhead Test, and Mechanical Integrity Test on September 24, 2009.

Lhereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below- grade tank has been/will be constructed or closed according to NMOCD guidelines \Box , a general permit \Box or an (attached) alternative OCD-approved plan \Box . SIGNATURE $Cmdy Afta db$ TITLE Environmental Coordinator DATE 9/17/09				
Type or print name Cindy Hurtado For State Use Only	E-mail address: cindy.hurtado@wnr.com	Telephone No. (505)632-4161		
APPROVED BY: Conditions of Approval (if any):	TITLE	DATE		

Submit 3 Copies To Appropriate District Office	State of New Me: Energy, Minerals and Natur		Form C-103 May 27, 2004
District 1 1625 N, French Dr., Hobbs, NM 88240 District II	OIL CONSERVATION		WELL API NO. 30-045-29002-00
1301 W. Grand Ave., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran	eis Dr.	5. Indicate Type of Lease STATE FEE X
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87	303	 State Oil & Gas Lease No. N/A
OD NOT USE THIS FORM FOR PROPO	CES AND REPORTS ON WELLS SALS TO DRILL OR TO DEEPEN OR PLU CATION FOR PERMIT" (FORM C-101) FO		7. Lease Name or Unit Agreement Name Disposal
1. Type of Well: Oil Well	Gas Well 🔲 OtherX (Disposal)		8. Well Number #001
 Name of Operator San Juan Refining Co/Western Ref 	ining Southwest, Inc. – Bloomfeld F	Refinery	9. OGRID Number 037218
 Address of Operator #50 Road 4990 Bloomfield, NM 	87413		 Pool name or Wildcat Blanco/Mesa Verde
4. Well Location			
	eet from the South 1		
Section 27	·	11 NMPM	
Pit or Below-grade Tank Application 🗌 c	11. Elevation (Show whether DR,	RKB, RT, GR, etc.)	
	<u>r Closure [_]</u> aterDistance from nearest fresh w	n Anne ann th' Think	
Pit Liner Thickness: mil			ostruction Material
······································		**************************************	
12. Check 2	Appropriate Box to Indicate Na	ature of notice,	Report of Other Data
NOTICE OF IN PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING	TENTION TO: PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPL	SUB REMEDIAL WOR COMMENCE DRI CASING/CEMEN	
OTHER: Radioactive Tracer Test X□		OTHER:	
			d give pertinent dates, including estimated date tach wellbore diagram of proposed completion

For the 5-year review of the permit and permit renewal, Western Refining Southwest, Inc. – Bloomfield Refinery requests permission to perform a Radioactive Tracer test to assess the mechanical integrity of the cement behind the casing on the Class I injection well referenced above. Two millicuries of Antimony B124 isotope will be used in the test. A Gamma Ray correlation log will be run. This test is tentatively scheduled for September 23, 2009.

Bloomfield Refinery also requests permission to perform the annual High Pressure Shutdown Test, Bradenhead Test, and Mechanical Integrity Test on September 24, 2009.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or belowgrade tank has been/will be constructed or closed according to NMOCD guidelines . a general permit or an (attached) alternative OCD-approved plan .

Hutado indy c TITLE_Environmental Coordinator_DATE__9/17/09 SIGNATURE Type or print name Cindy Hurtado E-mail address: cindy.hurtado@wnr.com Telephone No. (505)632-4161

TITLE Env. Engri

For State Use Only

APPROVED BY:	Care o	China	
Conditions of Approv	val (if any):	1	

DATE 9/18/09

Chavez, Carl J, EMNRD

From:	Hurtado, Cindy [Cindy.Hurtado@wnr.com]
Sent:	Friday, September 11, 2009 8:52 AM
То:	Chavez, Carl J, EMNRD; Schmaltz, Randy; Krakow, Bob
Cc:	Roberts, Kelly G, EMNRD; Kuehling, Monica, EMNRD
Subject:	RE: UICI-9 WRSW-Bloomfield Refinery Acid Job 9-09
Attachments:	Resubmitall C-103 Acid Job 9-09.pdf

Good Morning,

Please find attached the updated C-103 with the correct PBTD of 3520' in the job scope. Please let me know if you require any other corrections.

Thanks, Cindy

Cindy Hurtado Environmental Coordinator Western Refining Southwest, Inc. - Bloomfield Refinery cindy.hurtado@wnr.com 505-632-4161

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, September 10, 2009 5:56 PM
To: Hurtado, Cindy
Cc: Roberts, Kelly G, EMNRD; Kuehling, Monica, EMNRD
Subject: RE: UICI-9 WRSW-Bloomfield Refinery Acid Job 9-09

Cindy:

Please resubmit C-103 with updated info. and I will expedite approval and work with OCD Aztec directly. Thanks.

Carl J. Chavez, CHMM New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 Office: (505) 476-3490 Fax: (505) 476-3462 E-mail: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")

From: Hurtado, Cindy [mailto:Cindy.Hurtado@wnr.com]
Sent: Thursday, September 10, 2009 3:56 PM
To: Chavez, Carl J, EMNRD; Kuehling, Monica, EMNRD; Schmaltz, Randy; Krakow, Bob
Subject: RE: UICI-9 WRSW-Bloomfield Refinery Acid Job 9-09

Carl,

Yes, I believe you are correct. Do you want me to adjust the job procedure accordingly?

Thanks, Cindy

Cindy Hurtado Environmental Coordinator From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, September 10, 2009 3:26 PM
To: Hurtado, Cindy; Kuehling, Monica, EMNRD; Schmaltz, Randy; Krakow, Bob
Subject: RE: UICI-9 WRSW-Bloomfield Refinery Acid Job 9-09

Cindy:

In step 3 I think you meant to state "RIH w/ 1-1/4" coil tubing to PBTD at 3520' instead of 3221' KB" right (see well bore diagram below)?

2

Submit 3 Copies To Appropriate District Office District I	State of New Me Energy, Minerals and Natu		Form C-103 May 27, 2004	
1625 N. French Dr., Hobbs, NM 88240 District II			WELL API NO. 30-045-29002-00	
1301 W. Grand Ave., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran	icis Dr.	5. Indicate Type of Lease STATE FEE X	
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87	505	6. State Oil & Gas Lease No. N/A	
(DO NOT USE THIS FORM FOR PROPOSA DIFFERENT RESERVOIR. USE "APPLICA		JG BACK TO A	 Lease Name or Unit Agreement Name Disposal 	
PROPOSALS.)	as Well 🗍 OtherX (Disposal)		8. Well Number #001	
2. Name of Operator San Juan Refining Co/Western Refin		Refinery	9. OGRID Number 037218	
 Address of Operator #50 Road 4990 Bloomfield, NM 87 			10. Pool name or Wildcat Blanco/Mesa Verde	
4. Well Location		·····		
Unit LetterI_: 2442fee	et from the l	ine and1250_fee	t from theEastline	
Section 27	Township 29 Range			
	11. Elevation (Show whether DR,	RKB, RT, GR, etc.)		
Pit or Below-grade Tank Application or C				
			ance from nearest surface water	
Pit Liner Thickness: mil	Below-Grade Tank: Volume		nstruction Material	
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data				
NOTICE OF INT		SUB	SEQUENT REPORT OF:	
	—	REMEDIAL WOR		
	CHANGE PLANS	COMMENCE DRI	LLING OPNS. PANDA	
		- CAUNG/CEWEN		
OTHER: Well Stimulation/Acidize W		OTHER:		
 13. Describe proposed or comple 	ted operations. (Clearly state all j	pertinent details, and	d give pertinent dates, including estimated date	

of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Western Refining Soutwest, Inc. - Bloomfield Refinery requests permission to perform well stimulation/acidization procedures on the Class 1 Injection well referenced above. Procedures for this project are attached. The procedure will be scheduled pending approval from OCD.

I hereby certify that the information above	is true and complete to the best of my knowledg	e and belief. I further certify that any pit or below
grade tank has been/will be constructed or, closed a	ccording to NMOCD guidelines 🛄, a general permit 🔲	or an (attached) alternative OCD-approved plan .
SIGNATURE Cindy Junta	do	rdinatorDATE9/11/09
Type or print name Cindy Hurtado	E-mail address: cindy.hurtado@wnr.com	Telephone No. (505)632-4161

Type or print name Cindy Hurtado For State Use Only

E-mail address: cindy.hurtado@wnr.com

Chinas______ TITLE Env. Engr lare 1. DATE 9/11/09 APPROVED BY: Conditions of Approval (if any):

Western Refining

<u>Procedure</u>

August 18, 2009

Well: Location:	Disposal Well #1	Field: Elevation:	Mesaverde
Ву:	Sec 26, T29N, R11W San Juan Co, New Mexico John Thompson	API No: Lease No:	30-045-29002

Project:

Lower injection pressure by pumping 15% HCl acid.

Prior to Job:

Spot 2 ea. 400 bbl frac tanks for flowback after acid job. Spot flowback tank for clean out. Use water truck for displacement. Hydrant on location has too much pressure for standard suction lines to acid truck. Hard line well to tank (s) for flowback.

Clean out and Acid Spot:

- 1. Hold safety meeting w/ Halliburton, Sanjel and Western Refinery personnel and review procedure.
- 2. Rig up Sanjel coil tubing unit & Halliburton to well head and pressure test pumps and lines to 4000 psi.
- 3. RIH w/ 1-1/4" coil tubing to PBTD at 3520' KB. Clean out if necessary.
- 4. Pull coiled tubing up to bottom perforation at 3,460' KB (bottom perforation).
- 5. Spot 200 gal of 15% HCL w/ inhibitors.
- 6. Pull out coiled tubing and shut well in overnight.

Acid / Ball Off:

- Establish an injection rate with water. Pump 4,000 gal of 15% HCl acid w/ inihibtors and mutual solvent with 300 ea. bio-degradable ball sealers. Pump 1st 500 gal without balls.
- Displace acid to bottom perforation with ~ 24 bbls of 2% KCl water (or disposal water if available).
- 9. Shut well in for ~ 1 hr and let acid treatment "soak". Rig down and release Halliburton.
- 10. Open well through 2" line and let well flow back to frac tank. Flow back approximately 400 bbls of fluid.
- 11. After flowback, return well to injection status and monitor rates and pressures.

Materials & Vendors

Acid: Halliburton Energy Services Coil Tubing: Sanjel Frac Tank: M&R Trucking Roustabouts: Englehart Éngineering/Supervision: Walsh Enginéering

• 5.4

Submit 3 Copies To Appropriate District Office	State of New Me		Form C-103
District I	Energy, Minerals and Natu	ral Resources	May 27, 2004 WELL API NO.
1625 N. French Dr., Hobbs, NM 88240 District II	OIL CONSERVATION	DIVISION	30-045-29002-00
1301 W. Grand Ave., Artesia, NM 88210 District III	1220 South St. Frar		5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87		6. State Oil & Gas Lease No.
District IV 1220 S. St. Francis Dr., Santa Fc, NM	Santa I C, IVIVI O	505	N/A
87505			
(DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLIC		ЈG ВАСК ТО А	7. Lease Name or Unit Agreement Name Disposal
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well OtherX (Disposal)		8. Well Number #001
2. Name of Operator			9. OGRID Number
San Juan Refining Co/Western Ref	ining Southwest, Inc. – Bloomfeld	Refinery	037218
3. Address of Operator #50 Road 4990 Bloomfield, NM	27412		10. Pool name or Wildcat Blanco/Mesa Verde
· · · · · · · · · · · · · · · · · · ·	8/413		Bianco/iviesa verde
4. Well Location		1050 free	the Past Inc
	eet from the South l		
Section 27	Township 29 Range 11. Elevation (Show whether DR,		
	The Elevation (Bhow Whether BA,	nno, ni, on, en,	
Pit or Below-grade Tank Application Do	r Closure		
Pit typeDepth to Groundwa	terDistance from nearest fresh w	ater well Dista	ance from nearest surface water
Pit Liner Thickness; mil	Below-Grade Tank: Volume	bbls; Co	nstruction Material
12. Check A	ppropriate Box to Indicate N	ature of Notice, 1	Report or Other Data
NOTICE OF IN PERFORM REMEDIAL WORK TEMPORARILY ABANDON	TENTION TO: PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPL	SUBS REMEDIAL WORF COMMENCE DRII CASING/CEMENT	
OTHER: Well Stimulation/Acidize		OTHER:	
			give pertinent dates, including estimated date ach wellbore diagram of proposed completion

Western Refining Soutwest, Inc. – Bloomfield Refinery requests permission to perform well stimulation/acidization procedures on the Class I Injection well referenced above. Procedures for this project are attached. The procedure will be scheduled pending approval from OCD.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or belowgrade tank has been will be constructed or closed according to NMOCD guidelines [], a general permit [] or an (attached) alternative OCD-approved plan [].

intado TITLE Environmental Coordinator DATE 6/29/09 SIGNATURE m

Type or print name	Cindy	Hurtado
For State Use Only		

E-mail address: cindy.hurtado@wnr.com

Telephone No. (505)632-4161

APPROVED BY: Carl	Chanes	TITLE	Environmental	Engineer	DATE	6/29/09
Conditions of Approval (if any):				J		

Western Refining

<u>Procedure</u>

May 12, 2009

Well: Location:	Disposal Well #1	Field: Elevation:	Mesaverde
	Sec 26, T29N, R11W		
	San Juan Co, New Mexico	API No:	30-045-29002
By:	John Thompson	Lease No:	

Project:

Lower injection pressure by pumping 15% HCI acid.

Prior to Job:

Spot 2 ea. 400 bbl frac tanks (only 1 will be needed if displacement water is available from refinery). Hard line well to 1 tank (for flowback).

Acid Job:

- 1. Hold safety meeting w/ Halliburton and Western Refinery personnel and review procedure.
- 2. Rig up Halliburton to well head and pressure test pumps and lines to 4000 psi.
- 3. Pump 3,500 gal of 15% HCl acid w/ inihibtors and mutual solvent with 250 ea. biodegradable ball sealers
- 4. Displace acid to bottom perforation with ~ 24 bbls of 2% KCl water (or disposal water if available).
- 5. Shut well in for ~ 1 hr and let acid treatment "soak". Rig down and release Halliburton.
- 6. Open well through 2" line and let well flow back to frac tank. Flow back approximately 400 bbls of fluid.
- 7. After flowback, return well to injection status and monitor rates and pressures.

Materials & Vendors

Acid: Halliburton Energy Services Frac Tank: M&R Trucking Roustabouts: Englehart Engineering/Supervision: Walsh Engineering

Chavez, Carl J, EMNRD

From: Sent: To: Cc: Subject: Attachments: Chavez, Carl J, EMNRD Monday, June 29, 2009 11:51 AM 'Hurtado, Cindy' Kuehling, Monica, EMNRD RE: UICI-009 UIC Class I (non-haz.) Disposal Well C-103 Well Stimulation 6-29-09.pdf

Cindy:

Please find attached an OCD signed and approved C-103.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 Office: (505) 476-3490 Fax: (505) 476-3462 E-mail: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")

From: Hurtado, Cindy [mailto:Cindy.Hurtado@wnr.com]
Sent: Monday, June 29, 2009 11:18 AM
To: Chavez, Carl J, EMNRD; Kuehling, Monica, EMNRD
Cc: Schmaltz, Randy; Krakow, Bob
Subject: UICI-009 UIC Class I (non-haz.) Disposal Well

Good morning Carl,

Please find attached the updated C-103 Notice and the job scope for the acidization procedure that we previously discussed with you. I sincerely apologize for inadvertently filling out the notice incorrectly. We will schedule the job after your approval has been received. We will be sure to coordinate with Monica Kuehling and Kelly Roberts of the Aztec District office with scheduling and safety training.

Thanks, Cindy

Cindy Hurtado Environmental Coordinator Western Refining Southwest, Inc. - Bloomfield Refinery <u>cindy.hurtado@wnr.com</u> 505-632-4161

This inbound email has been scanned by the MessageLabs Email Security System.

Submit 3 Copies To Appropriate District State of New Mexico Office Finance Minerals and Natural Recourses		Form C-103 May 27, 2004			
1625 N. French Dr., Hobbs, NM 88240 District II	Energy, Minerals and Natural Resources				
District.III OIL CONSERVATION District.III 1220 South St. Fra		30-045-29002-00 5. Indicate Type of Lease			
1000 Rio Brazos Rd., Aztec, NM 87410 District IV Santa Fe, NM 87		STATE FI 6. State Oil & Gas Lease N	BE X		
1220 S. St. Francis Dr., Santa Fc, NM 87505		N/A			
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		7. Lease Name or Unit Agr Disposal	coment Name		
PROPOSALS.) 1. Type of Well: Oil Well Gas Well OtherX (Disposal)		8. Well Number #001			
2. Name of Operator		9. OGRID Number			
San Juan Refining Co/Western Refining Southwest, Inc. – Bloomfeld Refinery 3. Address of Operator		037218 10. Pool name or Wildcat			
#50 Road 4990 Bloomfield, NM 87413		Blanco/Mesa Verde			
4. Well Location					
Unit Letter_1: 2442feet from theSouth Section 27 Township 29 Range			、 、		
11. Elevation (Show whether DR					
Pit or Below-grade Tank Application [] or Closure []	-	141 E 77, 194			
Pit typeDepth to GroundwaterDistance from nearest fresh v	vator well - Dist	ance from nearest surface water			
	bbls; Co				
12. Check Appropriate Box to Indicate N	lature of Notice.	Report or Other Data			
NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK PLUG AND ABANDON TEMPORARILY ABANDON CHANGE PLANS PULL OR ALTER CASING MULTIPLE COMPL	REMEDIAL WOR	LLING OPNS. PAND A)F: g casing □ □		
OTHER: Well Stimulation/Acidize Well	OTHER:				
 Describe proposed or completed operations. (Clearly state all p of starting any proposed work). SEE RULE 1103. For Multip or recompletion. 	pertinent details, and le Completions: At	l give pertinent dates, includir tach wellbore diagram of prop	ig estimated date osed completion		
Western Refining Soutwest, Inc. – Bloomfield Refinery requests permis Class I Injection well referenced above. Procedures for this project are a The procedure will be scheduled pending approval from OCD.	ssion to perform wel attached.	l stimulation/acidization proc	edures on the		
I hereby certify that the information above is true and complete to the be	est of my knowledge	e and belief. I further certify that	t any pit or below-		
grade tank has been will be constructed or closed according to NMOCD guidelines $[$					
SIGNATURE indy Huntado TITLE F	Invironmental Coor	dinator_DATE6/29/09_	10/11/11/11 6 and an a second strate a sec		
Type or print name Cindy Hurtado E-mail address: cindy.hur For State Use Only		Telephone No. (505)632-41			
APPROVED BY: Carly Charles TITLE Environmental Engineer DATE 6/29/09 Conditions of Approval (if any):					

Western Refining

Procedure

May 12, 2009

Well:	Disposal Well #1	Field: Mesaverde
Location:	Sec 26. T29N. R11W	Elevation:
	San Juan Co, New-Mexico	API No: 30-045-29002
By:	John Thompson	Lease No:

Project:

Lower injection pressure by pumping 15% HCI acid.

Prior to Job:

Spot 2 ea. 400 bbl frac tanks (only 1 will be needed if displacement water is available from refinery). Hard line well to 1 tank (for flowback).

Acid Job:

- 1. Hold safety meeting w/Halliburton and Western Refinery personnel and review procedure.
- 2. Rig up Halliburton to well head and pressure test pumps and lines to 4000 psi.
- Pump 3,500 gal of 15% HCl acid w/ inihibitors and mutual solvent with 250 ea; biodegradable ball sealers
- Displace acid to bottom perforation with ~ 24 bbls of 2% KCI water (or disposal water if available).
- 5. Shut well in for ~ 1 hr and let acid treatment "soak" Rig down and release Halliburton.
- 6 Open well through 2" line and let well flow back to frac tank. Flow back approximately 400 bbis of fluid.
- 7. After flowback, return well to injection status and monitor rates and pressures.

Materials & Vendors

Acid: Halliburton Energy Services Frac Tank: M&R Trucking Roustabouts: Englehart Engineering/Supervision; Walsh Engineering

Chavez, Carl J, EMNRD

From: Sent: To: Subject: Chavez, Carl J, EMNRD Wednesday, May 13, 2009 3:22 PM 'Hurtado, Cindy' C-103 Signed 4/16/09

Cindy:

Hi. I looked over your recent C-103 Form for down-hole clean-out.

I notice you did not check of "Notice of Intention to" perform remedial work.

I think you know a follow-up final form identifying the final work completed is required and should be submitted for the "Subsequent Report of" section.

You did not provide details on the down-hole remedial work steps that would actually be performed on the well. .

Could you please resend the C-103 form with detailed information on what is actually being performed down-hole during the remedial work, i.e., pull tubing, bail fill from BOH, cleanout to what depth? What are you doing to packer and tubing (replacement?), size of final tubing, etc.

More steps are needed to understand what steps you will be performing. Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 Office: (505) 476-3490 Fax: (505) 476-3462 E-mail: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")



BLOOMFIELD REFINERY

WNR Misioed NYSE

REJEIVED

2003 HPR 21 HM 11 26

Jim Griswold New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Certified Mail: 7007 0220 0004 0187 0756

April 16, 2009

RE: Bloomfield Refinery UIC Class I Well API# 30-0-45-29002 Disposal Well #1 Unit I, Section 27, Township 20, Range 11

Dear Mr. Griswold,

Please find enclosed the C-103 notification for well maintenance work (down-hole cleanout) that will be conducted on Bloomfield Refinery's Class I Injection Well. This work is tentatively scheduled for 4-22-09 but will occur no later than 4-30-09.

If you need additional information, please contact Randy Schmaltz (505-632-4171), Bob Krakow (505-632-4135), or myself (505-632-4161).

Sincerely. Intado

Cindy Hurtado Environmental Coordinator Bloomfield Refinery – Western Refining

Cc: Randy Schmaltz – Environmental Manager – Bloomfield Refinery Brandon Powell – NMOCD Aztec District Office

Submit 3 Copies To Appropriate District Office	State of New M			Form C-103	
District I 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natural Resources		WELL API NO.	June 19, 2008	
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DIVISION		0-045-290002-00		
District III	1220 South St. Francis Dr.		5. Indicate Type of Lease STATE FEE		
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87505		6. State Oil & Gas Lease No.		
1220 S. St. Francis Dr., Santa Fe, NM 87505					
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A			7. Lease Name or Unit A	greement Name	
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH					
PROPOSALS.) 1. Type of Well: Oil Well Gas Well OtherX			8. Well Number #001		
2. Name of Operator			9. OGRID Number		
Western Refining Souhwest, Inc. – Bloomfield Refinery 3. Address of Operator			037218 10. Pool name or Wildcat		
#50 Road 4990 Bloomfield, NM	87413				
4. Well Location					
Unit Letter1_: 2442 Section 24			eet from theEast MPM County	line	
Section 24	Township 29 11. Elevation (Show whether DI		MPM County	/ San Juan	
				an a	
12 Charle A	uuuuuuista Davita Indiaata l	Jatura of Nation D	an art ar Othan Data		
12. Check A	ppropriate Box to Indicate 1		-		
PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK ALTERING CASING TEMPORARILY ABANDON CHANGE PLANS COMMENCE DRILLING OPNS. PAND A					
PULL OR ALTER CASING		CASING/CEMENT J			
OTHER:		OTHER:			
13. Describe proposed or comple	eted operations. (Clearly state all k). SEE RULE 1103. For Multi				
or recompletion.	k). SEE KOEE 1105. 101 Main	pie completions. Attac	in wendore diagram of p	toposed completion	
This Class I Injection Well operated b	y Western Refining Southwest, I	nc. – Bloomfield Refin	ery is permitted by New	Mexico OCD	
Discharge Permit Disposal Well UIC	L-9. EPA ID# NMD089416416				
Well Maintenance (Down-Hole Clear	Out) will be conducted starting	approximately on 4-22-	09 or no later than 4-30-	09.	
	l.				
[
Spud Date:	Rig Release D	Date:			
I hereby certify that the information a	bove is true and complete to the	best of my knowledge a	nd belief.		
$\Lambda $, II	1				
SIGNATURE Cindy Hurtan	(U TITLE Envir	onmental Corclinat	DATE 4	-16-09	
Type or print name Chuby HU	(U TITLE Envir urtado E-mail addres	cindy, hurtada a		75-632-4161	
For State Use Only	E-mail addres	SS. Cherry have have &	WHILE PHONE: 3		
APPROVED BY: Conditions of Approval (if any):		<u>.</u>	DATE		