<u>District i</u> 1625 N. French Di., Hobbs, NM 88240 District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office For permanent pits and exceptions submit to

the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

0685	
QUV	

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Type of action K Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Ex Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-lo		•	
Please be advised that approval of this request does not relieve the operator of liability should operations environment. Nor does approval relieve the operator of its responsibility to comply with any other appli			
1			
Operator WPX Energy Production, LLC OG			
Address PO Box 640 / 721 S Main Aztec, NM 87410			
Facility or well name Rosa Unit #600			
API Number30-039- 2978029 783 OCD Permit Number			
U/L or Qti/Qtr <u>F</u> Section <u>11</u> Township <u>31N</u> Range <u>4V</u>	County Rio Arriba		
Center of Proposed Design Latitude 36 91472N Longitude	<u>-107 22420W</u> NAD	□1927 🗵 1983	
Surface Owner 🛛 Federal 🗌 State 🔲 Private 🔲 Tribal Trust or Indian Allotment			
2			
☐ Pit: Subsection F or G of 19 15 17 11 NMAC			
Temporary ⊠ Drilling ⊠ Workovei	RCVD M	AR 1'12	
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A		NS.DIV.	
☐ Unlined Liner type Thickness 20 mil ☐ LLDPE ☐ HDPE ☐ PVC	C Other	1.3	
⊠ String-Reinforced			
Liner Seams Welded Factory Other Volume 47	000 bbl Dimensions L 320 x	W_70'_xD_12'	
☐ Closed-loop System: Subsection H of 19 15 17 11 NMAC Type of Operation ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to active intent)	tties which require prior approval of a	permit or notice of	
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other			
Lined Unlined Liner type Thicknessmil LLDPE HDPE	PVC Other		
Liner Seams			
4			
Below-grade tank: Subsection Lof 19 15 17 11 NMAC			
Volumebbl Type of fluid			
Tank Construction material			
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off			
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other			
Liner type Thicknessmil			
5			
Alternative Method:			
Submittal of an exception request is required Exceptions must be submitted to the Santa Fe En	vironmental Bureau office for consideration	eration of approval	

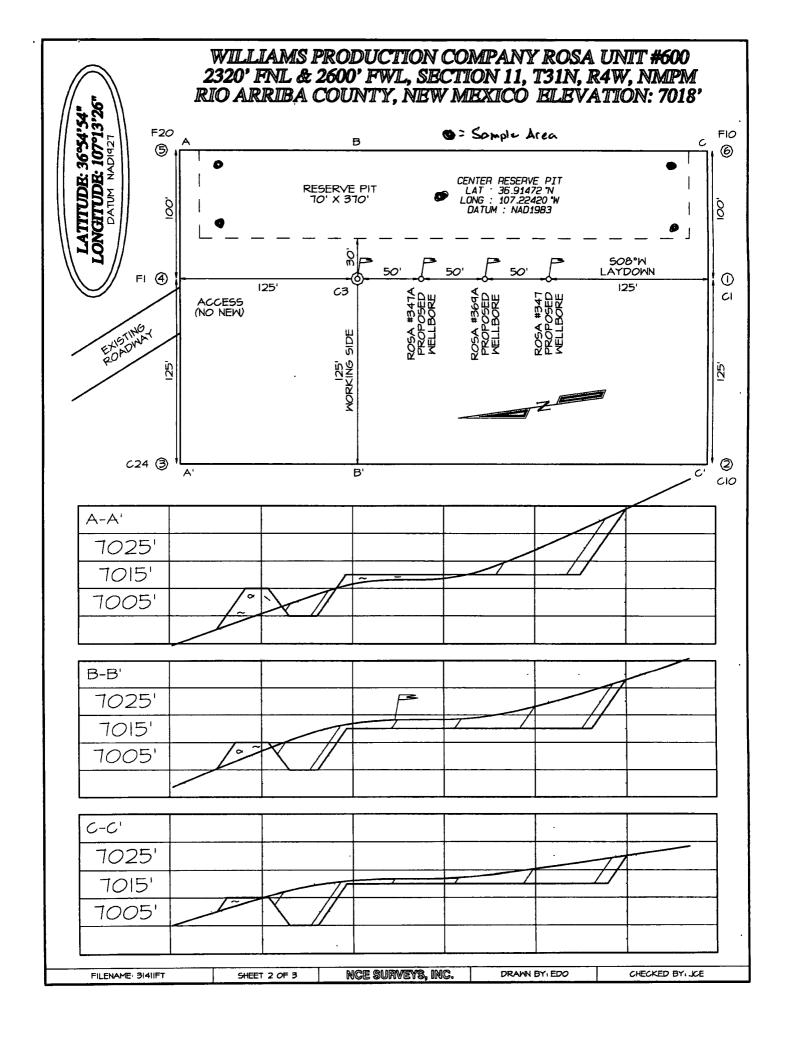
Rosa Unit 600

Fencing: Subsection D of 19 15 17 11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)	
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)	hospital
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate Please specify As per BLM specifications	
7	
Netting: Subsection E of 19 15 17 11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	
Monthly inspections (If netting or screening is not physically feasible)	
8 Signs: Subsection C of 19 15 17 11 NMAC	-
☐ 12"x 24". 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
Signed in compliance with 19 15 3 103 NMAC	
9	
Administrative Approvals and Exceptions:	
Justifications and/or demonstrations of equivalency are required Please refer to 19 15 17 NMAC for guidance Please check a box if one or more of the following is requested, if not leave blank:	
Administrative approval(s) Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau of	office for
consideration of approval Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	
10	
Siting Criteria (regarding permitting): 19 15 17 10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept	stable source
material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate the control of t	priate district
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dryi	
above-grade tanks associated with a closed-loop system.	
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	☐ Yes ☒ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	☐ Yes ☒ No
- Topographic map, Visual inspection (certification) of the proposed site	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (Applies to temporary, emergency, or cavitation pits and below-grade tanks)	☐ Yes ☑ No ☐ NA
- Visual inspection (certification) of the proposed site, Aerial photo, Satellite image	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application	☐ Yes ☐ No ☐ NA
(Applies to permanent pits) - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image	M NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	☐ Yes ☑ No
watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application - NM Office of the State Engineer - iWATERS database search, Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ⊠ No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality, Written approval obtained from the municipality	
 Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (certification) of the proposed site 	☐ Yes ⊠ No
Within the area overlying a subsurface mine - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ⊠ No
Within an unstable area	☐ Yes ⊠ No
 Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society, Topographic map 	
Within a 100-year floodplain - FEMA map	☐ Yes ☒ No

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19 15 17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19 15 17 9 NMAC ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19 15 17 9 NMAC ☐ Sitting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17 10 NMAC ☐ Design Plan - based upon the appropriate requirements of 19 15 17 12 NMAC ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17 12 NMAC ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC ☐ Previously Approved Design (attach copy of design) API Number
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19 15 17 9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19 15 17 9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19 15 17 10 NMAC Design Plan - based upon the appropriate requirements of 19 15 17 11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19 15.17 12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19.15 17.13 NMAC Previously Approved Design (attach copy of design) API Number
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
Permanent Pits Permit Application Checklist: Subsection B of 19 15 17 9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19 15 17 9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17 10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19 15 17 11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19 15 17 11 NMAC Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19 15 17 11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17 12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19 15 17 11 NMAC Nuisance of Hazardous Odors, including H ₂ S, Prevention Plan Cilimatological Plan - based upon the appropriate requirements of 19 15 17 11 NMAC Monitoring and Inspection Plan Erosion Control Plan - Closure Plan - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC
Proposed Closure: 19 15 17 13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal Closure Plan Checklist: (19.15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. □ Protocols and Procedures - based upon the appropriate requirements of 19 15 17 13 NMAC □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC □ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC

9 15 17 13 D NMAC) achment if more than two		
Disposal Facility Name Disposal Facility Permit Number Disposal Facility Permit Number		
or future service and operations?		
17 13 NMAC		
eptable source material are opriate district office or may be roval. Justifications and/or		
☐ Yes ⊠ No ☐ NA		
⊠ Yes □ No □ NA		
☐ Yes ⊠ No ☐ NA		
e, or playa Yes No		
tion Yes No		
or stock Yes No		
rdinance Yes No		
ed site		
☐ Yes ⊠ No		
logical Yes No		
☐ Yes ☑ No		
IMAC ments of 19 15 17 11 NMAC 3 NMAC andards cannot be achieved)		

Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief
Name (Print) Title
Signature Date
e-mail address Telephone
20 OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: 3/01/2012
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.
☐ Closure Completion Date:10/21/2011
Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain
23 Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.
Disposal Facility Name Disposal Facility Permit Number
Disposal Facility Name Disposal Facility Permit Number
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check
mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division)
Proof of Deed Notice (required for on-site closure)
 ✓ Plot Plan (for on-site closures and temporary pits) ✓ Confirmation Sampling Analytical Results (if applicable)
Waste Material Sampling Analytical Results (required for on-site closure)
 ✓ Disposal Facility Name and Permit Number ✓ Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
Site Reclamation (Photo Documentation) On-site Closure Location. Latitude36 91495 Longitude _107 22438 NAD □1927 ☑ 1983
25
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print) Ben Mitchell Title Regulatory Specialist
Signature B Wth Date 2/27/2012
c-mail addressben mitchell@wpxenergy com Telephone505-333-1806



Williams Production Co., LLC San Juan Basin: New Mexico Assets

Temporary Pit In-place Closure Report Drilling/Completion and Workover (Groundwater >100 feet bgs)

 Well:
 Rosa Unit #600

 API No:
 30-039-29783

Location: F-S11-T31N-R04W, NMPM

In accordance with Rule 19 15 17 13 NMAC, the following plan describes the general in-place closure requirements of temporary pits on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard procedure for all temporary pits to be utilized for the drilling, completion and/or workovers of oil and gas wells operated by WPX. For those temporary pits which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the pit closure on a Closure Report using Division Form C-144. The Report will include the following:

- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection reports
- Sampling Results
- Division Form C-105 WELL COMPLETION OR RECOMPLETION REPORT AND LOG
- Copy of Deed Notice filed with the County Clerk (format to meet County requirements)
 <u>A deed notice is not required on state, federal or tribal land according to NMOCD FAQ dated October 30, 2008 and posted on the NMOCD website</u>

General Plan Requirements.

1 All free standing liquids will be removed from the pit at the start of the closure process. Liquids will be removed in a manner that the appropriate District Office approves including, recycled, reused, reclaimed, evaporated, and/or disposed of in a Division-approved facility. Once all free liquids are removed, the sludge will be stabilized by one of the following methods depending on equipment availability. blending with clean stockpiled soils or dewatering using a Bowl Decanter Centrifuge then blending with clean stockpiles soils.

To the extent practical, free liquids were pulled from the reserve pit following the completion rigoff Haul dates were from 10/1 9/2011 to the Rosa SWD #2 API # 30-039-30812 (Order -1236)

2. The preferred method of closure for all temporary pits will be on-site closure by in-place burial, provided all the criteria in 19 15 17 13 B are met

On-site burial plan for this location was approved by the Aztec District Office on 4/27/2010

3 The surface owner shall be notified of WPX's proposed closure plan using a means that provides proof of notice (i.e. certified mail/return receipt requested)

Williams notified the SMA of its intent to use a temporary pit and onsite burial in the Surface Use Plan in the well APD. The SMA was notified by email see attached. No return receipt required per BLM FFO/NMOCD MOU dated 5/4/09.

4 Within six months of the "rig-off" status occurring WPX will ensure that the temporary pit is covered, recontoured and reseeding in progress

<u>Drill rig-off (9/30/2010 Completion rig-off10/10/2011 Pit covered 10/21/2011. Pit area along with unused portions of well pad to be interim reclaimed in accordance with Surface Management Agency requirements in APD-COAs and per BLM FFO/NMOCD MOU dated 5/4/09</u>

- Notice of Closure will be given to the Aztec District office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following.
 - a Operators Name (WPX)
 - b Well Name and API Number
 - c. Location (USTR)

The Aztec District Office of NMOCD was notified by email using a format acceptable to the District Copies of the notification from Abode Contractors on 10/7/2011 is attached

Page 7 of 9 Rosa Unit 600

- The pit liner shall be removed above "mud level" after stabilization. Removal of the liner will consist of manually or mechanically cutting the liner at the mud level and removing all remaining liner. Care will be taken to remove "all" of the liner (I e anchored material). All excessive liner will be disposed of at a licensed disposal facility (probably San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426).

 The liner to the temporary pit was removed above the "mud level" once stabilized. Removal of the liner consisted of manually cutting the liner and removing all remaining liner material above the "mud level" including the anchor material. All excessive liner was disposed of at the San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426.
- Solidification of the remaining pit contents shall be achieved by mixing non-waste containing, earthen material The solidification process will be accomplished use a combination of natural drying and mechanical mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed safe and stable. The mixing ratio shall not exceed 3 parts non-waste to 1 part pit contents.

Following removal of free liquids, the pit contents were mixed with non-waste containing, earthen material in order to achieve appropriate solidification and a consistency that was deemed safe and stable. The solidification process was accomplished using a combination of natural dryingand mechanically mixing using a dozer and trackhoe. The mixing ration was approximately 2.5-3 parts native soil to 1 part pit contents. Solidification was completed 10/19/2011

8. A five-point composite sample will be taken of the pit using sampling tools and all samples tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), all contents will be handled per 19.15.17.13(B)(1)(a) (i.e. dig and haul to a Division-approved facility). Approval to haul will be requested of the Aztec District office prior to initiation.

A five-point composite sampling was taken of the pit area using sampling tools and the sample was tested per 19 15 17 13(B)(1)(b) NMAC Results are shown in Table 1 and lab reports are attached

Table 1 Closure Criteria for Temporary Pits in Non-sensitive Areas with Groundwater > 100 bas.

Components	Testing Methods	Limits (mg/Kg)	Pit (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2	ND
BTEX	EPA SW-846 Method 8021B or 8260B	50	ND
TPH	EPA SW-846 Method 418 1	2500	963
GRO/DRO	EPA SW-846 Method 8015M (GRO/DRO)	500	ND
Chlorides	EPA SW-846 Method 300 1	500	110

9. Upon completion of solidification and testing, the pit area will be backfilled with non-waste earthen material compacted to native conditions to enable effective revegetation for successful evapotranspiration. A minimum of four feet of cover including replacement of one foot of suitable material to establish vegetation, or the background thickness of topsoil, whichever is greater

Upon completion of solidification and testing, the pit area was backfilled with non-waste earthen material compacted to native conditions. A minimum of four feet of cover to the extent practical was achieved and the cover included just over a foot of topsoil suitable to establish vegetation

10 Following cover, the site will be recontoured to meet the Surface Management Agency or surface owner requirements. Re-contouring will attempt to match fit, shape, line form, and texture of the surrounding geography. Re-shaping will include drainage control, prevent ponding, and minimize erosion. Natural drainages will be unimpeded and stormwater Best Management Practices (BMPs) will be used to aid in soil stabilization and protection surface water quality.

Following cover, Williams reestablished drainage and contours to approximately match previous topography meeting the Conditions of Approval in the APD and the direction offered by a BLM/USFS inspector Cover and re-contouring were completed 10/21/2011

- 11 Notification will be sent to the Aztec District office when the reclaimed area is seeded Williams will comply with Surface Management Agency reseeding requirements in the COAs of the APD for the referenced well, per BLM FFO/NMOCD MOU dated 5/4/09
- 12 WPX shall seed the disturbed areas the first growing season after the pit is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintained that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. Note. WPX assumes the seeding stipulations including mix and seeding methods.

specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability Williams will comply with Surface Management Agency reseeding requirements in the COAs of the APD for the referenced well, per BLM:FFO/NMOCD MOU dated 5/4/09.

13 The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the on site burial upon the abandonment of all wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the on site burial of the temporary pit. The plate will be easily removable and a four-foot tall riser will be threaded into the top of the collar marker and welded around the base with the operations information at the time of all wells on the pad abandoned. The information will include Operator Name, Lease Name, Well Name, and number, USTR, and an indicator that the marker is an onsite pit burial location.

The temporary pit was located with a steel marker meeting the above listed specifications. The marker has the following information welded for future reference: S11-T31N-R04W-F, "In Place Burial" (photo attached). Steel marker set 12/14/2011.

Page 9 of 9 Rosa Unit 600



EPA METHOD 8015 Modified Nonhalogenated Volatile Total Petroleum Hydrocarbons

Client:	WPX Energy	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	02-06-12
Laboratory Number:	61038	Date Sampled:	01-31-12
Chain of Custody No:	13351	Date Received:	02-02-12
Sample Matrix:	Soil	Date Extracted:	02-02-12
Preservative:	Cool	Date Analyzed:	02-03-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid

Waste, SW-846, USEPA, December 1996.

Comments:

Rosa Unit 600

Analyst

5796 US Highway 64, Farmington, NM 87401

Review



Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	02-03-12 QA/QC	Date Reported:	02-06-12
Laboratory Number:	61041	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-03-12
Condition:	N/A	Analysis Requested:	TPH

	I-Cal V Date	I-Cal RE	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	40942	9.996E+02	1.000E+03	0.04%	0 - 15%
Diesel Range C10 - C28	40942	9.996E+02	1.000E+03	0.04%	0 - 15%

Blank Conc. (mg/L= mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	2.8	0.2
Diesel Range C10 - C28	4.4	0.1

Duplicate Conc. (mg/Kg)	Sample⊌	Duplicate -	% Difference	Range
Gasoline Range C5 - C10	ND	ND	0.00%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.00%	0 - 30%

Spike Conc. (mg/Kg)	ু Sample.⊹	Spike Added	Spike Result	% Recovery	Accept: Range
Gasoline Range C5 - C10	ND	250	258	103%	75 - 125%
Diesel Range C10 - C28	ND	250	314	125%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid

Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 61009-61018, 61035-61038 and 60141-60143



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	WPX Energy	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	02-06-12
Laboratory Number:	61038	Date Sampled:	01-31-12
Chain of Custody.	13351	Date Received:	02-02-12
Sample Matrix:	Soil	Date Analyzed:	02-03-12
Preservative:	Cool	Date Extracted:	02-02-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

		Det.
	Concentration	Limit
Parameter	(ug/Kg)	(ug/Kg)

Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
p,m-Xylene	ND	10.0
o-Xylene	ND	10.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	85.5 %
	1,4-difluorobenzene	91.5 %
	Bromochlorobenzene	114 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

Rosa Unit 600

Analyst

VY///

Ph (505) 632-0615 Fx (505) 632-1865

envirotech-inc.com laboratory@envirotech-inc.com



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A		Project#:		N/A	
Sample ID:	0203BBLK QA/Q0		Date Reported:		02-06-12	
Laboratory Number:	61041		Date Sampled:		N/A	
Sample Matrix:	Soil		Date Received:		N/A	
Preservative:	N/A		Date Analyzed:		02-03-12	
Condition:	N/A		Analysis:		BTEX	
			Dilution:		10	
Calibration and	West DE		21	Cartific Control	在"的CARLES DE LE MARCHES LA MARCH	7 7 7
Calibration and Detection Limits (ug/L)	real Art	C-Cal RF Accept Ran		Blank Conc	TO STORY AND THE PRINCE THE TO THE	
Detection Limits (ug/L) Benzene	1.9004E+007			MATTER STREET, THE STREET, MATTER ST	TO STORY AND THE PRINCE THE TO THE	
Detection Limits (ug/L)		Accept: Ran	gë 0 = 15%()	Conc	Limit	
Detection Limits (ug/L) Benzene	1.9004E+007	Accept: Ran	ge.0 = 15%	Conc ND	Limit 1.0	
Detection Limits (ug/L) Benzene Toluene	1.9004E+007 1 9179E+007	Accept: Ran 1.9042E+007 1.9218E+007	ge 0.215% 0.2% 0.2%	Conc X	1.0 1.0	

Duplicate Conc? (ug/Kg)	Sample ⊱	plicate.	%Diff.	Accept Range	Detect: Limit
Benzene	ND	ND	0.0%	0 - 30%	10.0
Toluene	ND	ND	0.0%	0 - 30%	10.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	10.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	10.0
o-Xylene	ND	ND	0.0%	0 - 30%	10.0

Spike Conc: (ug/Kg)	Sample : Amo	unt Spiked Spil	ked Sample : %	Recovery	Accept Range	
Benzene	ND	500	523	105%	39 - 150	
Toluene	ND	500	523	105%	46 - 148	
Ethylbenzene	ND	500	522	104%	32 - 160	
p,m-Xylene	ND	1000	1,030	103%	46 - 148	
o-Xylene	ND	500	524	105%	46 - 148	

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996

Comments:

QA/QC for Samples 61019-61024, 61035-61038 and 61041-61043

Ph (505) 632-0615 Fx (505) 632-1865

envirotech-inc.com laboratory@envirotech-inc.com

5796 US Highway 64, Farmington, NM 87401



TOTAL PETROLEUM HYDROCARBONS

Client:	WPX Energy	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	02-08-12
Laboratory Number:	61038	Date Sampled:	01-31-12
Chain of Custody No:	13351	Date Received:	02-02-12
Sample Matrix:	Soil	Date Extracted:	02-02-12
Preservative:	Cool	Date Analyzed:	02-02-12
Condition:	Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

96.3

6.4

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Rosa Unit 600

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

envirotech-inc.com laboratory@envirotech-inc.com



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS **QUALITY ASSURANCE REPORT**

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

02-07-12

Laboratory Number: Sample Matrix:

Freon-113

Date Sampled:

N/A 02-02-12

Preservative:

N/A

Date Analyzed: Date Extracted:

02-02-12

Condition:

N/A

Analysis Needed:

TPH

Calibration - I-cal Date C-Cal Date C-Cal RE 2% Difference Accept Range

02-02-TPH.QA/QC 61036

01-07-12

02-02-12

1,610

1,720

6.84%

+/- 10%

Blank Conc. (mg/Kg)

Concentration

Detection Limit

TPH

TPH

TPH

ND

5.8

Duplicate Conc. (mg/Kg)

Sample

Düplicate 83.5

% Difference: Accept. Range 7.12%

+/- 30%

Spike Conc. (mg/Kg)

Sample 89.9

Spike Added Spike Result % Recovery 2,000

89.9

1,730

82.8%

80 - 120%

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

QA/QC for Samples 61036-61038



Chloride

Client: **WPX Energy** Project #: 04108-0136 Sample ID: Reserve Pit Date Reported: 02-08-12 Lab ID#: 61038 Date Sampled: 01-31-12 Sample Matrix: Soil Date Received: 02-02-12 Preservative: Cool Date Analyzed: 02-03-12 Condition: Intact Chain of Custody: 13351

Parameter

Concentration (mg/Kg)

Total Chloride

110

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Rosa Unit 600

Analyst

Review

Ill namely

CHAIN OF CUSTODY RECORD

13351

Client: WPX En	2101	Pro	oject Name / Locat Rosa Unii	ion:	.00								Α	NAL	YSIS	/ PA	RAM	ETEF	RS			
Email results to: With Lane Client Phone No.:	e.11	Cli	ent No.:		helly			_	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metais	Cation / Anion		TCLP with H/P	CO Table 910-1	118.1)	RIDE				Sample Cool Sample Intact
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No.	/Volume ontainers	Pr HgCl ₂	eservat HCI	live	трн (Л	втех	VOC (I	RCRA	Cation	RCI	TCLP	со та	TPH (418.1)	CHLORIDE				Sample Cool
Raserva Pit	1/3/12	12:30 pm	61038	1	402				V								V	سن				Yy
																					+	
																					-	
																						_
						-																
Relinquished by: (Signature)//	1	<u> </u>		Date	Time	Recei	ved b	y: (Si	gnatu	ıre)											ate	Time
Man Sheller	/ 			Date 3/2/12	200	صي			-		\2.									3.5	1.12	7:55
Relinquished by: (Signature)						Recei																
Sample Matrix																						
Soil 💢 Solid 💢 Sludge 🗌	Aqueous 🗌	Other 🗌																				
Sample(s) dropped off after						ytica	i Lai	bora	itory	•	ırana	o, CC	D 813	01 • 1	abore	atorv	@env	ıroted	ch-inc	.com		

District I 1625 N French Dr., Hobbs, NM 88240

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005 Instructions on back Submit to Appropriate District Office

1301 W Grand Avenue, Artesia, NM 88210

OIL CONSERVATION DIVISION .1220 South St. Francis Dr.

State Lease - 4 Copies Fee Lease - 3 Copies

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

District III

Santa Fe, NM 87505

AMENDED REPORT

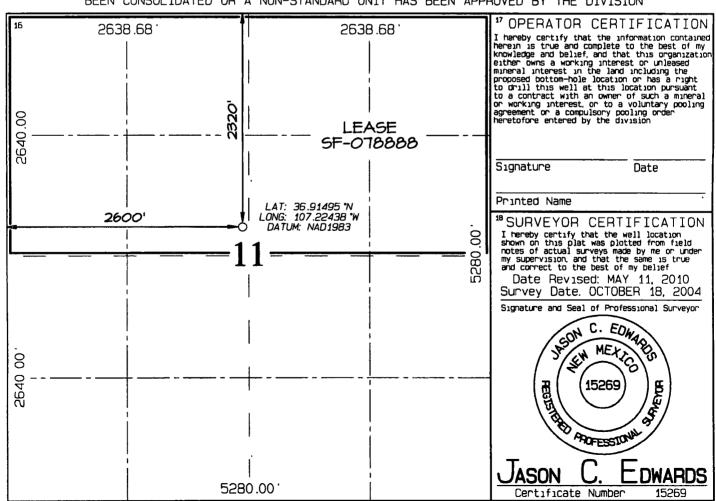
WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	*Pool Code	Pool Name						
	97232 / 72319 / 71599	BASIN MANCOS / BLANCO MESAVERDE	/ BASIN DAKOTA					
*Property Code 17033		Well Number 600						
'OGRID No 120782		Operator Name PRODUCTION COMPANY	*Elevation 7018 '					

¹⁰ Surface Location

					3di 1000	E06061011				
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
F	11	31N	4W		2320	NORTH	2600	WEST	RIO ARRIBA	
		11 E	Bottom	Hole L	ocation I	f Different	From Surf	ace		
UL or lat no	Section	Township	Township Range		Feet from the	North/South line	Feet from the	East/West line	County	
				İ						
12 Dedicated Acres			<u> </u>		¹³ Joint or Infill	³⁴ Consolidation Code	²⁵ Onder No	·		
	32	0.0 Acre	es – N,	/2						
							1			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



Meador, Tasha

Friday, October 07, 2011 8:14 AM

Brandon Powell From:

Sent:

To: Meador, Tasha; Granillo, Lacey, Lepich, Mark, 'Jon J Miller'
Correction on Williams Clean ups Cc:

Subject:

Correction on the notice for Williams clean ups. I stated we would start the RU 602, but we are going to start the RU #600 instead The RU #602 is already finished Sorry for the mistake,

Johnny Stinson

Gen. Manager/ Adobe Contractors

Office: (505)632-1486 Mobile: (505)320-6076

johnny@adobecontractorsinc.com

Submit To Approp	nate Distric	et Office				State of Ne										rm C-105	
District I 1625 N French Dr	r Hobbs N	M 88240		Ene	ergy, I	Minerals and	d Na	atural R	lesources		1 WELL	API	NO		•	July 17, 2008	
	District III Oil Conservation Division									30-039-29783							
1000 Rio Brazos R	Rd Aztec N	NM 87410					2 [Type of Lease] South St. Francis Dr. □ STATE □ FEE ☒ FED/INDIAN								IAN		
District IV 1220 S St Francis						Santa Fe, N					3 State Oil & Gas Lease No SF-078888						
WELL COMPLETION OR RECOMPLETION REPORT AND LOG 4 Reason for filing										to the state of th							
Annual Control of the											5 Lease Nam	e or l		nent Na osa	<u>ıme</u>		
☐ COMPLET	ION REP	PORT (Fill in	boxes	#1 throu	gh #31	for State and Fee	e well	ls only)			6 Well-Numl	hor '					
Z C-144 CLO	ınd the pla									ıd/oı	o & Silarana	DCI.	Rosa U	nıt #600)		
	WELL [NING	□PLUGBAC	< <u></u>	DIFFER	ENT RESER	VOIE	R OTHER						
8 Name of Oper	ator WI	PX Energy Pr	oductic	on, LLC							9 OGRID!	1207	782				
10 Address of C	perator	PO BOX 64	10	AZTE	C, NM	87410					11 Pool name	or W	'ildeat	=			
12.Location	Unit Lti	Section		Towns	hıp	Range	Lot		Feet from	the	N/S Line	Feet	t from the	E/W I	Line	County	
Surface:																	
BH:				<u></u>													
13 Date Spudde	d 14 Da	ate T D Read	hed	15 [Date Rig	Released 10/10/2011		1	6 Date Com	pletec	d (Ready to Proc	luce)	17 R1	Elevat Γ, GR, ε	ions (DF etc.)	and RKB,	
18 Total Measur	ed Depth	of Well		19 P	lug Bac	k Measured Dep	oth	20) Was Direc	ctiona	al Survey Made	,	21 Type	e Electi	ic and Ot	her Logs Run	
22 Producing In	terval(s), o	of this comple	etion - ?	Top, Bot	tom, Na	ame	•						İ				
23					CAS	ING REC	OR	D (Rei	ort all s	trin	os set in w	ell)					
CASING SI	ZE	WEIGH	T LB /I		0710	DEPTH SET			OLE SIZE		CEMENTIN		CORD	AN	ИOUNT	PULLED	
											-						
												<u> </u>					
										1							
SIZE	ТОР		ВОТ	ГТОМ	LIN	ER RECORD SACKS CEM	ENT	SCRE	EN	25 SI			NG RECO EPTH SET		PACK	ER SET	
26 Perforation	wood (u	nterval, size,	and nur	mber)				27 44	TID CHOT	, ED	ACTURE, CE	EMEN	JT COLIE	C7C	ETC		
20 Terioration	riccora (ii	intervar, size,	ina nai	mocr)					INTERVA		AMOUNT A						
28							PR	ODUC	TION		ı						
Date First Produc	ction	1	roduct	ion Metl	nod (Flo	owing, gas lift, pi				p)	Well Status	s (Pro	d or Shut-	ın)			
Date of Test	Hours	Tested	Cho	oke Size		Prod'n For Test Period		Oıl - B	bl	Ga 	s - MCF	l w	ater - Bbl		Gas - C	Dil Ratio	
Flow Tubing	Casın	g Pressure	Cal	culated 2	24-	Oıl - Bbl		Ga	s - MCF		Water - Bbl		Oil Giav	vity - A] PI <i>- (Coi</i>	r)	
Piess		6		ut Rate									""	,	. (00)	, ,	
29 Disposition of	of Gas (Soi	ld used for fi	el veni	ted etc)						I.	.	30	Test Witne	ssed By			
31 List Attachm	ents											ı					
32 If a temporar	y pit was i	used at the we	ell, atta	ch a plat	with th	e location of the	temp	orary pit									
33 If an on-site	burial was	used at the w	ell, 1ep	out the c	xact loc	cation of the on-s	site bu	urial									
,,,	C .1	I C		,	· , · .	Latitude 3	6 914	195 Long	itude 107 22	2438	NAD :		, ,	,	,, .	,	
I hereby certi	fy that the en Mitcl			nown o		<u>1 sides of this</u>						-			<u>a belief</u>		
Signature 4	N	and the second				-	7	Γıtle F	<u>Legulatory</u>	Spe	cialist Date	<u> 2</u>	127/2	012			
E-mail Addre	ess ben	mitchell@	wpxe	nergy (com												



TEMPORARY PIT INSPECTION REPORT

Well Name	F	Rosa Unit 600 (cor	e)	Field Name	Basın Dr	(Basın MC Blanco	MV	API#		30-039-29783	Report #	1	
Location	SEN	IW Sec 11, T31N,	R4W	County		Rio Arriba		State		NM	Rpt Date	7/17/2010	
Date	Report Type	Inspector	Liner Intact Y/N	Fenced Y/N	Slopes Intact Y/N	Adequate Freeboard Y/N	Oil Free Y/N	Flare Pit Liquid Free Y/N		Comment			
8/19/10			Υ	Y	Υ	Υ	Υ	Y		[505] 215-9201			
8/20/10	Daily		Y	Υ	Y	Υ	Υ	Y		[505] 215-9201			
8/21/10	Daily		Y	Y	Y	Y	Y	Y	,	[505] 215-9201			
8/22/10	Daily		Y	Υ	Y	Υ	Υ	Y	,	[505] 215-9201			
8/23/10	Daily		Υ	Υ	Y	Υ	Y	Υ	,	[505] 215-9201			
8/24/10	Daily		Y	Y	Y	Y	Y	Y	,	[505] 215-9201			
8/25/10	Daily		Y	Υ	Y	Υ	Y	Y	,	[505] 215-9201			
8/26/10	Daily		Υ	Υ	Υ	Y	Y	Y	,	[505] 215-9201			
8/27/10	Daily		Y	Υ	Υ	Y	Y	Y	,	[505] 215-9201			
8/28/10	Daily		Y	Υ	Y	Y	Y	Y	,	[505] 215-9201			
8/29/10	Daily		Y	Y	Y	Υ	Y	Y		[505] 215-9201			
8/30/10	Daily		Y	Y	Υ	Υ	Y	Y	,	[505] 215-9201			
8/31/10	Daily		Y	Y	Y	Y	Y	Y	,	[505] 215-9201			
9/1/10	Daily		Y	Υ	Υ	Υ	Y	Y	,	[505] 215-9201			
9/2/10	Daily		Y	Υ	Υ	Υ	Y	Y	,				
9/3/10	Daily		Y	Υ	Y	Y	Y	Y	,				
9/14/10	Weekly		Y	Y	Υ	Y	Y	Y	,				
10/1/10	Weekly		Y	Y	Υ	Y	Y	Y	,				
10/21/10	Weekly		Y	Υ	Υ	Υ	Y	Y	,		<u>. </u>		
11/18/10	Weekly		Y	Υ	Y	Y	Y	Y	,				
12/1/10	Weekly		Y	Υ	Υ	Y	Y	Y	,				
12/21/10	Weekly		Y	Υ	Υ	Υ	Y	Y	,				
1/14/11	Weekly		Y	Υ	Y	Υ	Y	Y	,				
1/30/11	Weekly		Υ	Υ	Y	Υ	Υ	Y	,				
2/17/11	Weekly		Y	Υ	Υ	Υ	Υ	Y	,				
3/4/11	Weekly		Υ	Υ	Υ	Υ	Υ	Y					
3/20/11	Weekly		Y	Υ	Υ	Y	Y	Y					
9/14/10	Weekly		Y	Υ	Y	Υ	Y	Y	,				
9/14/10	Weekly		Y	Y	Υ	Υ	Y	Y	,				
			20	01-2009 WellE	z Information M	anagement, LLC All	rights res	erved ver 1	11709jc				

